Previous references 375 1909-10 Educahi

Later references

File No 224

Serial Nos 1 to 4, 22 & 23

GENERAL AND REVENUE SECRETARIAT

Serial Nos 1 to 4, 7, 10 to 18, 22 & 23

Part B for September 1913

SUBJECT

Practical Education in Rural Schools

9 G of Edn, no 5337 dt 30-12-09, forwar
scheme for practical instruction in Elem
for remarks & suggestions

9 G. of Edn, no 2384/527 dt 28-1-10 Sus
arks & suggestions in the matter

of Edn, messrs M Shama Rao, B Dasappa,
aswamayya, S Rangacharlu, V Subrahm
Krishna Rao, H H Ramayya & [illegible]
58 of the committee no 2640-8 dt 16-9-10
GPB—4000—4711
a committee for the nos Shama Rao as
consider measures for revising the pres
of studies in Elem schools

From the Regr Cooperative societies, no 386/25-2 &
Subm to a copy of the Proceedings of the Comm
appointed to consider measures for revision
the present curricula of studies in village el
-ary schools, & requests that certain name
may be added to the committee

To the D. G. of Edn & Regr of Cooperative soc
no 7140-1 of 25-2-11 states, that it is n
advisable to add more members to the Com
& that the Committee may, if necessary
obtain the opinion of the Gentlemen m
manner which may be deemed suita

From the D. G. of Edn, no 405-6/289 of 10-11-11
states that the report of the Committee appo
to consider the question of providing prac
Education is under circulation among m
members

From the D. G. of Edn, no 7346/548 of 15-3-12
the report of the Committee

To the Supdt Govt Press, no 6823 &
forwards the report for being printe
200 copies may be supplied to this Offi

From the Presdt of the Practical ins
ommittee, no 431 of 22-3-12. Forw
duplicate copy of the last page of the r
ommittee

To the Supdt Govt press no 7123 of
forwards the last page of the report
of 13 & requests forwardal of parents
early

To the Supdt. Govt press, no 7412 of
— to add the printing of the.

B

Mysore Government Secretariat

Historical Section

REQUISITION FOR RECORDS

Bangalore

Dated 16/6/ *196* 9

13/16 6

1 File No Edn - 216 - 09

2 Serial No

3 To be put up for Diary or File No 2822 196 9

4 Name in block letters of person requisitioning } B Janaki

5 Signature of person requisitioning B Janaki

6 Designation Sr Asst

7 Department Edn

8 Section Schlp

9 Countersignature*

---

*In case of Secret / Top Secret papers countersignature of Section Officer/Under Secretary will be n

Note —The consent of the Department to which the file relates should be obtained if the file indente a different Department

WD 0204 —GPB—600 pads of 100 shts each—26 8 67

B

Mysore Government Secretariat

REQUISITION FOR RECORDS

Bangalore

Dated 28/4/1970

1 File No Edn 216 — 09

2 Serial No 3 - 4

3 To be put up for Diary or File No ED 7 CEN 70 196

4 Name in block letters of person requisitioning } B Janakiramu

5 Signature of person requisitioning B Janakiramu

6 Designation Sr Asst

7 Department Edn

8 Section Schlp

9 Countersignature*

---

* In case of Secret / Top Secret papers countersignature of Section Officer / Under Secretary will be necessary

- The consent of the Department to which the file relates should be obtained if the file indented for belongs to a different Department

WD 02040—GPB—600 pads of 100 shts each—26 8 67

G R S 11]

1909/10

GENERAL AND REVENUE SECRETARIAT

(Education)

NOTES

File No 224/09

FILE HEADING

Practical Education in Rural Schools

From

No	Dated	Received

Diary No	Enclos	Spare Copies	Serial No

BRIEF ABSTRACT OF LETTER

NOTES AND ORDERS

P T O

NOTES—First sheet

GPB—30 000—3 4 07

Serial No

Practical Education in Rural Schools

I believe we may now take it for granted that it is desirable to make it part of education in the more elementary schools that if possible the pupil should have obtained some qualification enabling him to turn to some practical walk of life to earn enough to live upon. If we have to wait till we can provide all our primary or lower secondary schools with separate teachers and separate apparatus for such teaching, it will, I fear take an indefinitely long period to make any appreciable beginning.

2 Agriculture is carried on in every village and small town in the State ~~without~~ in the neighbourhood of the

Serial No

School house In some village there are Carpenters and Iron Smiths working We Coop up our boys in school houses from week end to week end and in some place we have a pretence of exercising them in open air games It strikes me that it would be a desirable departure, if we make it a definite part of the School Curriculum tha the boys should be taken to the fields regularly during the agricultural season, and made to learn all the stages of agriculture as it is actually practised around them

3 In the same manner whenever there are facilities we may ~~easily~~ make them learn Carpentry and Smith's work, Pottery or Wickerwork, or such other simple trades as can be learnt by observation and

Serial No

a little practice

4 A few simple handbooks (which need not attempt ambitious fullness) may be got up for the help of the teacher In fact the work of the late should be mainly to take the pupils to the places & set them to work under the guidance of those actually engaged in the work

5 If these main lines are approved I would suggest that the ~~scheme~~ matter be referred to a committee to thresh out the subject & submit a scheme

4/10/9

6 This does not take the

GPB—50 000—13 5 08

Serial No

place of technical ~~schools~~ education, which should be provided for as far as our resources allow, gradually in increasing degree. So as to impart much more of improved practical knowledge than can be learnt from the ~~to~~ village ryots and workmen. It is only an attempt to show that education should from the beginning have a practical aim and to prove that a smattering of literary education ~~needs~~ should not make a man unfit or unwilling to turn his hands to any manual work that promises an adequate remuneration.

4/10/9

Dr Wann

7 Jan — Please consider the Syllabus & suggest the names of three teachers to constitute the Committee

5/1/10

NOTE—Contn sheet

Serial No

~~Consult~~

8 Submit to 2nd Cr for perusal & then consult 2d Gdn n-o

9 The I.G. may first be consulted, a copy of the note (with such verbal alterations as to make it impersonal) being sent to him

18/12/09

10 Asst Secy B & V

SB 19/12/09

11 Put up draft

20 12 09

12 Draft submitted

13 Issue

22-12 09

1 To the I Gl Edn in Mysore No 5537 & 30 12 09

Forwards a rough Scheme for practical instruction in Elementary Schools for remarks & suggestions

2 From the I Gl Edn in Mysore No 7384-521 & 28 1 1910

Submits his remarks and suggestions in the

Serial No

the matter

14. The D G of Edn is of opinion that the general idea of training boys in elementary village Schools to develop an intelligent interest in agricultural and other practical ~~work~~ pursuits is thoroughly sound & that if it takes a practical shape it is likely to counteract some of the pernicious influences of purely literary Education He says that there are only a few village School Masters who have take much practical interest in agricultural operations & that the Scheme can be given a trial in Schools where there are Schoolmasters who have been trained in agriculture or who have otherwise picked up sufficient knowledge on the Subject He adds that better results can be achieved if primary education in village Schools could be based upon nature study in the School garden and recommends that Mr Venkatadasappa working in his Office may be placed on

GPB—50 000—1d-5-08

G. R. S. 12]
General and Revenue Secretariat

Edn File No. 224 of 190 9

Serial No.

on special duty to select suitable Schools and start a few School gardens with the allotted amount (Rs 1000) for the current financial year.

Submitted for orders

AHK
3 2 1910

15 The report of the Dy of Edn containing his remarks on the rough scheme for practical Instruction in Elementary schools is submitted herewith

(Secy)

CDS 5/2

16 The proposal of the Dy. to employ Mr Venkata Dasappa on special duty in connection with the introduction of nature study may be approved though it is not clear whether Mr V has any experience of such courses of study & to be able to do useful work. In any case there is no harm in making a trial.

2nd Dy

CSS
5/2/10

2809

17. As Mr. Venkata Dasappa is not apparently as useful in

NOTE—Contn sheet

Serial No

in the D G's office as he ought to be, we may give him a trial on this special duty He has had a training (though he must have lost touch with it) in agriculture

18 As for the scheme, the D G of Edn is generally favourable to it Instead of appointing Committee, we may ask him to bring it into operation in a number of schools (where the proper kinds of teachers are available) — say some 50 schools — & report the result at the end of a year

19 The students should be taken out 2 or 3 days a week to lectures & study operations in the fields or in a carpenter's or blacksmiths workshop

20 Dewan

11/2/10

4522
12 2 10

Carried the Chief & Dy Inspector Schools do this Please circulate

6/4

Note—Contn sheet

GPB—S 000—7 4.09
15 SC

Serial No

1895
25 4 10

The present system of our elementary education requires thorough overhauling. The text books now in use are not quite adapted to the needs of the village schools. They contain much that is unnecessary and do not contain that which is comparatively more important & necessary for the student to learn. The curriculum also requires revision. The instruction imparted is of a literary character & is not such as to make him a more useful member of society. If the student leaves the school after 2 or 3 years training & does not continue his studies up to the lower secondary standard, well & good. He takes to his paternal calling & is not ashamed

Serial No

of ish He tills, the land tends cattle, drives carts and the knowledge of the three R's acquired by him makes him a better man than his father. But if he should continue his studies for the Lower Secondary Stamp he generally looks with disdain on his fields & cattle and will not turn to manual work of any sort. He wishes to become an official on Rs 6 or 7 or he becomes a loafer with rather expensive habits and a burden to his family. I am informed that there is no a single text book in Canarese teaching the dignity of manual labor and of agriculture as a profession. The teacher is merely a book worm & has no ideas himself

GPB— 5000—27 4-09

Serial No

of such subjects
Nature study as known in European Countries is not quite suited to Indian Conditions and least of all to village schools In the first place it would be impossible to find the teachers versed in the system

21 School gardening is an excellent thing & may be introduced wherever possible But I am aware of the practical difficulties in the way

22 There is great craving for learning of the right sort but it is not forthcoming in the village schools with a view to improve the present system and make it more practical and to instil a love for manual work and make the student a better farmer or agriculturist

G R S 12]
General and Revenue Secretariat

File No 224 of 1909-10

Serial No 22

I would suggest that a Committee of experienced officers may be appointed to draw up a scheme with liberty to revise the present Curriculum The Committee may hold such enquiries as may be necessary to check the drawbacks of the present system and measures for their remedy Their report may be submitted within 3 months I would suggest the following name to choose from

Bang — Mr M Shama Rao Ma

Bang — Mr B Dasappa, Deputy Inspector of Schools

Mys — Mr M Ramaswami, Deputy Inspr of Schools

Bang — Mr S Ranganathan, Retired Dy Inspr of Schools

Tumkur — Mr V Subramania Iyer Head Master Tumkur

Bang — Mr C Krishna Rao H Master Bangalore

NOTE—Contn sheet

GPB—5500—27 4 09

G R S 12]
General and Revenue Secretariat

G R File No 224 of 1909-10

6 4

Serial No

Dan

Tumkur

Mr K H Ramaiah, General Secretary Vokkaligas Sangh
Mr H Srinivasa Rao, Asstt Conservator of Forests Tumkur

W Rutherford
1st Councillor

25 April 1910

24 Dewan

CB 25/4/10

25 5823 26/4/10 The Committee may be appointed as proposed - Where Circular to 2nd Councillor also with a draft letter to 30 Mysore Dewan

Put up for K

CB 30/4/10

26 Submitted with a draft

Sd 2/5/10 3/5 Secretary

2nd C

4/5/10

27

CB 5/5/10

3785

NOTE—Contn sheet

GPB—55 1X — 7 4 09

Serial No

28 Please let me see this with the file about Industrial schools I fear the work imposed is too heavy to do along with rde Dary duties & requires at least one food offr to be placed special duty

6/5/10

29. Edn. file 462 of 1909 regarding Indl. schools is sub

Mm/ag 9/5/10

2nd Counsellor)

12/5/10

30 I have no objection but would it not be better to entrust this subject also to the same Committee as has been suggested for the consideration of Industrial schools? We may add some of the officers &c mentioned in the 8th Counsellor's note afte

Serial No

learning whether the gentlemen named in the latter Committee accept the work

Dewan 13/5/10

31

(Perhaps this is a proper subject for Conv Federation at a meeting of Council)

Recd 16/5

6145
17-5-10

27/8/11

32

I think the Report on the Pale may issue without further delay — [This is only for elementary schools — The other & higher questions relating to regular & industrial schools may be kept separate from this] Director

Direct action will be taken if a report not received by 1/10/10

It seems necessary to adjourn the Pale Committee to convene a meeting to consider the proposals in the order c it may be under law who also is to take the initiative

33

Resubmit to 2nd C

334

34

I have no objection as both the Dewan & 1st C are satisfied

3/9/10

35

M M Shamaiskow may be appointed as the convenor of the committee

36

2nd C] He may be called President

6/9/10

NOTE—Contn sheet

Serial No

37 Issue
13/9/10

3 To Mr 2-9 Edn No 2640-8 D 16-9-10
Messrs Sh Shama Rao M A
B Dasappa BA
M - Ramaswamaiyi BA
S Rangacharlu
V. Subramanyam BA
C Krishnaban BA
K H Ramaiyi BA
H Srinivasa Rao

Appoints a committee with Mr Shama Rao as president to consider measures for revising the present curricula of studies in Elementary Schools in rural parts so as to provide for practical education also

From Mr Shama Rao Esq, MA, Regr of Co-operative Societies in Mysore No 386/252 & 5 11-10

Submits a copy of the Proceedings of the Committee appointed to consider measures for revising the present curricula of studies in vellage elementary schools so as to provide practical education also and requests that the

NOTE—Contn sheet

G R S 12]
General and Revenue
Secretariat

File No 224 of 1909-10 2975/18

Serial No

1. Messrs M Sriniwasa Rao BA, marginally noted
2 and T.R Venkatswamy Naidu BA, gentlemen may be
(Circle Inspectors) added to the
3 Rev Mr Hollister of Kolar Committee in
4 Mr Mahomed Beg BA Dy Inspr of Schools accordance with
5 " G Subbasami Iyer, Supt. Govt Sub-School Kupam resolution (1) of the
6 " M-Nerizuma MA, Headmaster, Govt Normal School Kupam Committee's prop

38 Submitted for orders

39 The Reg of Co-operative Societies refers the matter direct to Govt and not through the Insp-Genl of Edn. From the last sentence of

Sl No 3 Govt Progs No 2640-8/Edn 224-09 dt 16 9 1910 it is understood that his references to Govt should be sent up through the Dir of Edn

40 The Dir of Edn was not consulted when the Committee was first appointed The appointment of more educational officers on the committee may cause inconvenience to work (may) The Insp-Genl of Schs may therefore be consulted before adding them to the Committee

Bdn of 23/1 (19) 23 11 10

41 This is desirable as the Insp-Genl has to watch the work of the Committee and has to give his views on their recommendations and also help in bringing the scheme to effect

2nd Counsellor) 26/11/10

NOTE—Contn sheet

GPB—50 000—

Serial No

962

42 There is no object ~~in~~ in enlarging the Committee unduly. We have a separate Committee for industrial school education. This deals only with enlarging the scope of studies in ordinary schools. ~~Perhaps~~ The names of Messrs Srinivasa Rau & Mahamad Beg may be added perhaps, but the other additions seem to be unnecessary

Dewan 5/12/10

9137
8.12.10
(2 files)

43 I don't think it necessary to add to the Committee. The names suggested are those of gentlemen who will be very able witnesses here ~~if~~ when [illegible]

or otherwise called upon

Dewan

44 Draft - reply accdg

16/2/11

45 Draft - Sanctd
Govt order 2nd Consultn)
33 14/2/11

1516

NOTE— Contn sheet

G R S 12 J
General and Revenue Secretariat

File No 224 of 1909-10 2995 5187

Serial No 46

Draft approved by 2nd Councillor 19 2 11

47 Issue 27/2/11

7 To The Dept of Edn
n Sri Shama Rao, Regr of Co-operative Societies (President of the Committee)

G.O. No 7140-1 dt 25/2/11

Stating that it is not advisable to add more members to the Committee and that the Committee may if necessary, obtain the opinion of the Gentlemen ~~[illegible]~~ in any manner which may be deemed suitable

~~From The Dept of Edn No 7846/548 dt 15/8/12 Forwards the Report of the Committee Sanctioning a draft forwarding the Report to the Press for being printed (Vide Slip Containing 1st Cir order)~~

Extract here

NOTE— Contn sheet

G R S 12]
General and Revenue Secretariat

File No 224 of 1939-40

Serial No 10

From the Govt of India
No 4056/2 Ed 10/11/11
States that the report of the Committee ~~for~~ appointed to consider the question of providing practical education in Elementary Schools is under circulation among the members.
48 Noted for information
HW 13/12/11
49 seen Await further communication
13/12/11

Norr — Contn sheet

Serial No

11 From the Dept of Edn
No 7346/548 dt 15/8/12
Forwards the Report of the Committee

50 1st Councillor's order on Ship
" Report of the Practical Edn Committee must be in office I brought from the Dept's office yesterday"
It should be sent to the Press for being printed at once as it is wanted for circulation to Edn Committee
(Sd) H V N
16/8/12

51 Sent with a draft forwarding the report to the Govt Press
HM
83
16/8/12

NOTE—Contn sheet

PTO

G R S 12]
General and Revenue Secretariat

Govt File No 224 of 1909-10

51 / 531 / 25

Serial No

52 Issue

12 To the Supdt, Govt Press
No 6823 dt 21/3/12
Forwards the report for being printed and requests that 200 copies may be supplied to this office.

13 From Mr. M Bhima Rao, M A, President of the Practical Arts Committee
Letter ~~dt 21/3/12~~ No 431 dt 22/3/
Forwards in continuation of Sl 11, ~~the~~ a duplicate copy of the last page of the report of the Committee
53 Submd. Many printed copies be ready

33 (18)
25/3/12

53 Rec'd 1 clear copy of the 1 all
now need to be sent 54
to Pres & the in Sl at
of it, sent, to 12
to be recalled

25/3/12

56
Submd with a draft

8/4
-126
29 3 12

Issue
29 3 12

NOTE—Contn sheet

GPR—50 000 12 8 10

Serial No

14 To the Supdt Govt Press no 7123 of 30 3 12

Forwards the last page of the Report signed by all the members of the committee, to be substituted for the last page previously sent and requests forwardal of printed copies as early as possible

57 The printed copies have not yet been received Submitted with a draft docket-reply (58) Issue

Sup 126 6 4 12 Issue

6 4 12

15 To the Supdt, Govt Press

No 7412 of 6/4/12

Requests him to expedite the printing of the report.

16 From do - No 1323 of 8/4/12

States that proof of some of the first portion of the report will be sent in a few days and that the work being heavy, it is not possible to put the whole of it in type as sufficient types are not available for the purpose

NOTE — Contn sheet

5243 25

G R S 12]

General and Revenue Secretariat

File No 224 of 1909-10

Serial No

59 No proofs have been called for. but only 200 copies have been ordered to be printed & supplied.

Filed for orders

60 Please put up draft to the Secy. saying that he need not send the proofs for approval and that the printing of the report may be expedited and copies sent as early as possible as they are urgently required

12 4 12

12417

61 Submit with a draft

8½ -12

12 4 12

62 Issue

12 4 12

63 The above draft is not issued, and a draft do is put up, as per verbal orders of the Asst Secy

Submit

8½ -12

12 4 12

64 Issue

13 4 12

NOTE Contn sheet

G R S 12]

General and Revenue Secretariat

Edn File No 224 of 1909

Serial No 17

Do to Mr Yates no 7592 & 13 4 12
Asks him to send a few copies of the Report at least before the next afternoon and states that it does not matter even if they are proofs and require correction

65 Report of the Prance
Education Commn
proof. Pensions were now
[illegible] Pre [illegible] been
[illegible] Yet the
[illegible] [illegible]
[illegible] [illegible] reminder

[illegible] 25/5/12

[illegible] 25/5/12

TV [illegible]

NOTE -Contn sheet

P 70

5843 27

G R S 12]

General and Revenue Secretariat | Edu File No 224 of 1909

Serial No

66 Draft DO submd

-126 28 5 12 67 Put up 28/5/12

DO of 28 5 12 to the Public Prosecutor

Requests the submission of the printed copies at once.

68 200 copies have been received today submd with 20 copies

See note 18 in file 2/6/12

-126 31 5 12 69 Please see 1st Councillors order on page 22 of note para 50 (Secy) 2/6/12

70 (1) 15 out of the 18 copies have been recd here (Rangoon) in camp over Sat & Mon & consequently copies are not available

(2) Are we to take any action now on the printed reports or are we to await proposals from the Govt of Education

1st Councillor 10/6

71 It may accord Ed Com Report: Ask Secy to expedite their report as Govt

See orders of the Govt of the Punjab under Schools on Magnus retained 1st ers period

16/12

NOTE—Contn sheet

5843 28

G I S 12]

General and Revenue Secretariat | Edn File No 224 of 909

Serial No

would like to have the views of the Committee before passing final orders

72 12/6/12

B 12 Wise h

Sd 13/6

Sd 13/6

73 Draft submd

Sd - 126

15 6 12

74 Issue

15/6/12

18 To the Secy to the Educational Committee, Economic Conference No 9659 of 18 6 12

Understanding that the Scheme of providing practical instruction in Rural Schools is under the consideration of the Educational Committee, desires to have the views of the Committee in the matter at an early date

22 From the Secy, Edn Committee of the Economic Conference No 116 Dt 9/10/12

Submits Copy of a Resolution

NOTE—Contn hee

R S 12]

eneral and Revenue Secretariat

Edn File No 224 of 1909-10

Serial No

of the Edn Committee of the Economic Conference on the Report of the Practical Education Committee to the effect that the Edn Committee approves of the general principles of the Scheme without committing itself to details of administrative arrangements

Submit for orders

Hm 23 18/10/12

75 Secretary

hz 27/12/12

76 1st Counsellor

23 27/12

77 The Committee was expected to make its recommendations more specific. The enquiry originated with my note of 4 Oct 1909 and the main idea was that in all rural schools the scope of instruction

NOTE —Contn sheet

should be enlarged and the teachers made to give an insight into the practical phases of life prevailing around them in a systematic manner Mr Wen who was consulted supported the suggestion and I was for carrying it out in a number of selected schools at once, instead of appointing a Committee as I had originally suggested. However the Dewan & Mr C. Mepes & Ananda Rao & K.P. Puttannachetty were for having a Committee to consider the subject & accordingly the Committee whose

printed & report is before us was appointed.

78 The scheme submitted by them consists of a large number of recommendations of a more or less general nature, the practical details being left to be filled in by the Ed. Dept. These principles may be generally approved, and the matter referred to the D.G. of Ed for ~~being~~ the recommendations being brought into action in such manner as he deems suitable, taking the existing facilities & resources into due consideration.

79 The rearranging of the

curricula should be carried out ~~early~~ in accordance with the recommendations made (e.g. 11, ~~12~~ -17)

(80) ~~Rules~~ Recommendations 6, 8 & 9 should be brought into ~~a number~~ some select schools at first as early as possible. The necessary provisions for additional expenditure may be made in the budget.

(81) Arrangement should be made in as many schools as possible to give practical instruction of an elementary character in elementary schools as recommended in Para 10. It would be desirable to have either lessons in ordinary readers or

special handbooks for the guidance of teachers compiled in Kannada

(82) Govt. will be glad to sanction any suitable proposals for training teachers as recommended in para 26-2-82 of the report

(83) ~~The Members~~ The thanks of Govt are due to the Members

(84) Please draft an order on these lines & submit within 3 or 4 days.

9/3/13

LCS 10/3/13

11/3/13

LB 10/3

PTD

221

34

I S 12]

General and Revenue Secretariat

File No 24 of 1912-13

	Serial No	
		55. Submit with a draft Secretary 14/3/13 1st 15/3/13 15/3/13 The draft order may be approved & issued Dewan 17/3/13
1977-1913		

NOTE—Contn sheet

35

Submitted to His Highness

1 Mr Shama Rao B A

2 Mr B Dasappa B A
Deputy Inspector of Schools

3 Mr M Ramaswamayya
Deputy Inspector of Schools

4 Mr S Pargacharlu
Retired Dy Inspector of Schools

5 Mr V Subramanya Iyer,
Head Master
Tumkur High School

6 Mr C Krishna Rao
Head Master, Bangalore High School

7 Mr K H Ramaiya

8 Mr H Srinivasa Rao
Asst Conservator of Forests

In Government Order No 2640-8 dated the 16th September 1910, a Committee consisting the marginally noted gentlemen was appointed to consider and report on the question of providing as a part of the curricula of studies in elementary schools practical instruction comprising elementary lessons in agriculture carpentry, &c The recommendations made by the Committee are contained in their report in the accompanying printed collection The Education Committee of the Economic Conference, who were also consulted approve (X) of the general principles on which the special Committee have proceeded and of the schemes suggested in the said report

2 The First Councillor (Mr Nanjundayya), on whose initiative the question was taken up has indicated in the accompanying draft order (D) the action to be now taken by Government on the Committee's report

3 I solicit His Highness's approval to the draft order

M Krishnaiyar
28th Aug 1913

X X

(X) Paper in the dispose

D Draft for approval

2201

36

Record of Cases submitted for the Orders of His Highness the Maharaja

Subject

Draft order on the scheme drawn up for giving practical instruction in Flementary Schools

1659
28 8/13

191

Order

Approved

~~KRW~~

1/9/13

Secretary

1 9 13

Issue orders

24/9/13

See Hon

28/4/13

(Agreement more the ~~[illegible]~~ the lot as for the period)

(G) R S 12]

General and Revenue Secretariat

Edu File No 224 of 1909-10

Serial No 23

To the Sd of Edn, Members of the Committee and Secy, Economy Confce no 3440-9 & 9913

Passes orders on the subject of revising the curricula of Elementary Schools & of providing practical instruction in the c

NOTE—Contn sheet

GP 26] 23/12/09 & F 161-09 X 113/09

3-

File No 1224/09

Serial No 1

Diary No of letter replied to

No 5537 Edn 224 09 dt 30 12 09

General and Revenue Secretariat
( )
the 190

To The Dy Dir of Edn, Mysore

Date of issue 30 12 09

Signed by

Sir,

In forwarding herewith a rough scheme for practical instruction in Elementary Schools, I am directed to request that you will be so good as to favor Govt with your ~~own~~ Remarks and Suggestions at a very early date.

I have etc

SUBJECT

Copy 24/12

27/12

For Seen 21/12

21/12/09

List of enclosures

Copied by

Examined by

GPB—10 000—20 4 00

03/12/89 8 F 161-89 224-09/1 Edn 226-09/1 8(1)

Practical Education in Rural Schools

It seems desirable that in the more elementary schools practical instruction should be made part of general education so that the pupils may obtain some qualifications enabling them to turn to some practical walk of life to earn enough to live upon. To wait till our primary or lower secondary schools are provided with separate teachers and separate apparatus for practical instruction will, it is feared, take an indefinitely long period to make any appreciable beginning in the matter.

2 Agriculture is carried on in every village and small town in the

State in the neighbourhood of the School house In Some Villages there are Carpenters and ironsmiths working It would perhaps be a desirable departure if it can be made a definite part of the School Curriculum that the boys should be taken ~~Regularly~~ to the fields Regularly during the agricultural Season and made to learn all the Stages of agriculture as it is actually practised around them. In the Same manner wherever there are facilities boys can be made to learn Carpentry and Smith's work, Pottery & Wickework or such other simple trades as can be ~~learned~~ done by observation and a little practice

3 A few Simple hand books (which need not attempt ambitious futures) may be got up for the

help of the teachers whose work should be mainly to take the pupils to the places and set them to work under the guidance of those actually engaged in the work

4 It is not intended that the above scheme should take the place of technical education which should be provided for as far as funds allow, gradually ~~in~~ in increasing ~~numbers~~ degrees, so as to impart much more of improved practical knowledge than can be learnt from the Village Raiyats and workmen It is only an attempt to show that education from the beginning should have a practical aim and to prove that a smattering of literary education should not make a man unfit or unwilling to turn his hands to

any manual work that promises an adequate Remuneration.

~~The about above is a Scheme indicated above is only a Rough one. The matter will have to be finally~~ and may be referred to a Committee to thresh out the Subject and submit ~~definite proposals.~~

For Sec 8

Thm
21/12/85

II 6

Edn 81]

OFFICE OF INSPECTOR GENERAL OF EDUCATION IN MYSORE

No 7384/527 Bangalore 28 January 1910

25236

From

~~H J BHABHA, Esq, M A,~~ J Weir Esq, M A,

Inspector General of Education in Mysore

Edn 224-09
8C(2)

To

C S Balasundaram Iyer Esq, B A,

Offg Secretary to the Government of H H the Maharaja of Mysore, General and Revenue Departments, Bangalore

SIR

With reference to your letter No 5537 / Ed 224-09 dated the 30th December 1909 forwarding a rough scheme for practical instruction in Elementary Schools, I have the honor to state that the general idea of training boys in elementary village schools to develop an intelligent interest in agricultural and other practical pursuits is thoroughly sound Of course, it is not to be expected that the children will be able to do very much practical work themselves, as they leave school so young that their physical powers are not sufficiently developed to fit them for very much useful wage-earning work But if the school teachers take them out to the fields or any available workshops once or twice a week and explain to them what is being done, it is likely to counteract some of the pernicious influence of purely literary education

The difficulty will be to find teachers who are capable of giving interesting and useful explanations on practical matters, for the class of men from whom the village schoolmasters are mostly recruited has not hitherto taken much practical interest in agricultural operations and most of the village schoolmasters probably

know little more about such matters than many of the boys who have picked up their information casually from their parents or other relations The scheme however can easily be given a trial in schools where there are schoolmasters who have been trained in agriculture or who have otherwise picked up sufficient knowledge on the subject

I do not think however that the object aimed at, is likely to be attained so thoroughly as it would be, if primary education in village schools could be based upon nature study in the school garden The efforts of the Department to start school gardens in village and other schools have not hitherto been particularly successful, and some expenditure has been incurred with little to show for it There are very great difficulties to be encountered, want of water, want of suitable sites, trespassing by men and animals, and theft of the produce of the gardens If however these difficulties could be overcome in a few elementary schools, a marked improvement might be expected in these schools before very long I propose that Mr Venkatadasappa who is at present working as a supernumerary in this office may be placed on special duty to select suitable schools and start a few school gardens within the allotted amount (Rs 1000) for the current official year

I have the honour to be,

Sir,

Your most obedient servant,

Inspector General

10

GRS 28]

File No 224-09
Serial No 3

14-9-10

Diary No of letter replied to 5236

Proceedings of the Government of His Highness the Maharaja of Mysore

GENERAL AND REVENUE SECRETARIAT
( )

the 19

Date of issue 16 9 10

Signed by MB R

READ—

Correspondence ending with letter No 7584/527 of the 28th January 1910 from the Dept of Edn in Mysore regarding a scheme for practical instruction in certain industries in Elementary Schools

ORDER THEREON—No

Order thereon

No 2640-8 of 16 9 10
Edn 224-09

over

SUBJECT

Order thereon

No 2

Govt consider that practical instruction should be made part of the curricula of studies in elementary schools so that the pupils may obtain some instruction ~~qualifications~~ enabling them to turn to some practical walk of life to earn enough to live upon. Such practical instruction should comprise elementary lessons in Agriculture, Carpentry, pottery, Wicker-work or ~~such other~~ similar simple trades.

A Committee consisting of the following gentlemen is appointed to consider this

GRS 27

GENERAL AND REVENUE SECRETARIAT

(Continuation Sheet draft form)

Subject. —

Mr. M Shama Rao, M.A. (President)

" B Dasappa, B.A., Dy Insp. of Schools

" M Ramaswamaiya, Do —

" S Rangacharlu, Retd Dy Insp. of Schools

" V Subramanya Iyer, Head Master, Tumkur H.S.

" C Krishna Rao, Head Master, Bangalore High School,

" K H Ramiah, Genl Secy Vokkaliga Sangha

" H Srinivasa Rao, Asst Conservator of Forests.

2 The Committee is requested to hold such enquiries as may be necessary to elicit the drawbacks

of the present System of
teaching in Elementary
Schools and the measures for
their remedy and draw up
a Scheme revising the
present curricula of the
Studies in these Schools ~~and~~
~~now~~ wherever it is necessary
and providing practical
instruction as referred to
in para 1 and submit
the Same to ~~the Govt. Govt~~ Govt
~~of Madras~~ within 3 months
of receipt of this order.

Minute to
Inspector of Schools

CK

4/5/10 For Secy to Govt
5/5/10

Secy to Govt
members of the Committee.

31 Aug 20

copy sent
to Krishnamurthy
15-9-20

15/9/10

2/6/10

2495

OFFICE OF THE REGISTRAR OF
CO-OPERATIVE SOCIETIES IN MYSORE

Dated, Bangalore, 2nd November 1910

No 382/Co-252

From

M Shama Rao, Esq., M A
Registrar of Co-operative
Societies in Mysore

To

C S Balasundarum Iyer, Esq , B A
Offg Secretary to the Government of H.H the
Maharaja of Mysore, General and Revenue Depts

Sir,

With reference to Government Order No 2640-8/Edn 224-09-3 dated 16th September 1910 re the elaboration of a scheme practical instruction in elementary schools in the State I have the honor to forward herewith for information a copy of the proceedings of the Committee Meeting held on the 24th October 1910 and to request that you will be good enough to obtain sanction of Government to add the Committee the marginally noted six gentlemen as members in accordance with resolution (1) of the proceedings

Messrs.
1.M.Srinivasa Rao, B.A } Circle Inspectors
2.T R.Venkatasawmi Naidu.B A }
3.Rev Mr Hollister of Kolar,
4.Mahomed Beg B.A. Deputy Inspector of Hindustani Schools,
5.G.Subbasawmi Iyer. Supdt. Govt Indl School, Mysore
6 M Hiriyanna Head Master Govt Normal School, Mysore

I have the honor to be,
Sir,
Your most obedient servant

REGISTRAR

The first meeting of the Committee appointed in Government Order No 2640-8/Edn 224-09-03 dated 26th September 1910 for elaborating a scheme of practical instruction in elementary schools was held in the Office of the Registrar of Co-operative Societies at Bangalore on the 24th October 1910 The meeting commenced at 2 P M and the following members were present - Messrs (1) M Shama Rao, President, (2) B Dasappa, (3) M Ramaswamaiya, (4) S Rangacharlu, (5) V Subramanya Iyer, (6) C Krishna Rao, (7) K H Ramiah and (8) H Srinivasa Rao, members Mr M Srinivasa Rao, Inspector of Schools, Mysore Circle was also present as per orders of the Inspector General of Education

RESOLVED

(1) that Government be requested to sanction the following additions to the Committee as members - Messrs M Srinivasa Rao and T R Venkatasawmy Naidu, Circle Inspectors, Rev Mr Hollister of Kolar, Messrs Mahmed Beg, Deputy Inspector of Hindustani Schools, G Subbasawmy Iyer, Superintendent of the Mysore Industrial School and M Hiriyanna, Head master of the Government Normal School, Mysore

(2) that each member of the Committee be asked to prepare and send to the President before the 15th November next a note containing his views relating to the following questions

(a) What industries can be conveniently and usefully taught in elementary schools?

(b) Are the pupils in a school to be taught only one industry or a variety of them?

(c) Is the teaching to be compulsory or optional?

(d) Are the teachers to be special men or is a selection to be made among the ordinary teachers and are the selected men to teach after any training that may be necessary?

14

(e) In the latter case, are the teachers to be paid any allowance, for their work or is the teaching of industries to be regarded as a part of their ordinary daily work?

(f) How far is the inclusion of practical instruction in agriculture and industries feasible under existing conditions in the curricula of elementray schools?

(g) The drawing up as far as possible of a practical working scheme with full details for each industry recommended to be taught

(h) What proportion of time may reasonably be allotted to literary and practical education respectively?

(i) Where are the materials and text books to come from?

(j) Which are the most suitable working hours for small village schools?

(3) That the names of the various industries practised in the different places where schools exist at present be ascertained

(4) That the note referred to in Resolution (2) be sent to the President before the 15th November next

(5) That the next meeting of the Committee be held about the beginning of December next

Dated Camp Mysore
28th October 1910

(Sd) M Shamaiah
PRESIDENT

Copy

~~To~~

Dated Bangalore
4th November 1910

[illegible]
for Registrar, Co-operative Societies

B N S

3

H S 28

Serial No

Diary No of letter replied to 2995

Proceedings of the Government of His Highness the Maharaja of Mysore

GENERAL AND REVENUE SECRETARIAT

( )

the 19

Date of p n 25-2-11

Signed by B R

READ—

Letter No 384/252-R, dated 2nd November 1910 from Mr. B. Shama Rao, Registrar of Co-operative Societies in Mysore and President of the Committee for Considering a Scheme for practical instruction in Elementary Schools forwarding copy of the proceedings of a meeting of the Committee

SUBJECT

GPB—10,000 1911 10

25/2/11

held on the 24th October 1910.

and recommending that the marginally noted gentlemen may be added to the Committee as per Resolution (1)

1 Mr. M. Veeranna Rao, Circle Inspr.
2 Mr. T. R. Venkatarama Naidu, Circle Inspr.
3 Rev. ~~W.~~ Hollister of Kolar
4 Mr. Mahomed Beg, Dy. Inspr. of Muhammadan Schools
5 Mr. G. Subbarama Iyer, Supdt., Govt. Schools, Mysore
6 Mr. M. Hiriyanna, Head Master, Normal Schools, Mysore

Order thereon

No 7140-1 / 20-12-09 25-2-11

Govt consider that it is not necessary to add any more members to the Committee. ~~The names registered are those of gentlemen who would be valuable witnesses to be examined or otherwise called upon to favor them with opinions~~

If they consider it necessary the Committee may examine these gentlemen or obtain their opinions which would no doubt be valuable in any other suitable manner

19/2/11

For Secy

19/2/11

To the Director of Public Instruction

23/2/11

2779

17

Edn 81]

OFFICE OF INSPECTOR GENERAL OF EDUCATION IN MYSORE

1009/1010
SECTION 224
FILE No 224

No 4056 / 289

Bangalore 16th November 1911

From

~~H J BHABHA Esq M A~~

The Inspector General of Education in Mysore

To

C S Balasundaram Iyer, Esq , B A ,

Offg Secretary to the Government of H H the Maharaja of Mysore, General and Revenue Departments, Bangalore

Sir

With reference to Government Order No 2640-8/Edn 240-09-3 of the 16th September 1910 appointing a Committee to consider the question of providing practical education in Elementary schools and requesting the submission of a report on the same and reminders on the subject, I have the honour to inform you that the President of the Committee states that the draft of the final report is in course of circulation among the members of the Committee

I have the honour to be,

Sir,

Your most obedient servant,

For Inspector General

T N P

GPB—1500—9 6 09

No C41
Encls one Report & one bundle of forms

18

Office of the Deputy Commissioner,
Tumkur District.
Dt. No 578
Dated Tumkur 1st March 1912

09 3 12
Edn
1224
11

From

M Shama Rao Esq , M A ,
President, Practical Instruction Committee
TUMKUR

10138
76
14/3/12
DAI GALE

To

C S Balasundaram Iyer Esq , B A ,
Secretary to the Government of
His Highness the Maharaja of Mysore ,
General and Revenue Departments,
Bangalore

Sir,

With reference to Government order 2640-8 Edn 224-09-3 dated 16th September 1910 appointing a Committee for elaborating a scheme of practical instruction for Elementary Schools , I have the honour to forward herewith the report of the Committee On behalf of the Committee , I beg to state that the delay in the submission of the report was unavoidable The report has been signed only by me at present as President and a duplicate copy of the last page of the report is under circulation to the members for formally obtaining their signatures This page with signatures will be submitted later

I have the honour to be

Sir,

Your most obedient servant

M Shama Rao

PRESIDENT

Forwarded - 15 3 12

H Mangundayya

Councillor in charge of the Office of the Inspector General of Education

I have the honour to forward Copy of Education Bangalore No 7346 dated the 15th March 1912

(Report with Appendices) 5748

Hon 16/3

From

The President Practical Instruction Committee

Tumkur

To

The Secretary to the Govt of Mysore, Gen and Rev Departments, Bangalore

Dated 1st March 1912

Despatched

Received

General No

No

Enclosure No

Forwards the report of the Committee appointed for elaborating a report on Practical Instruction for Elementary Schools

@@@@@@@@@@@@@

REPORT OF THE COMMITTEE ON PRACTICAL AND LITERARY INSTRUCTION IN ELEMENTARY SCHOOLS IN MYSORE

INTRODUCTION

Government in their Proceedings No 2640-2 Edu" 224-09-3 dated Bangalore , 16th September 1910 were pleased to make the following order

" Government consider that practical instruction should be made part of the curricula of studies in Elementary Schools so that the pupils may obtain some instruction enabling them to turn to some practical walk of life to earn enough to live upon Such practical instruction should comprise elementary lessons in Agriculture , Carpentry , Pottery , wicker work or similar simple trades A committee consisting of the following gentlemen is appointed to consider the subject -

Mr Shama Rao , M A ,	(President)
Mr B Dasappa ,	(Deputy Inspector of Schools)
Mr M Ramaswamaiya	(Do)
Mr S Rangacharlu	(Retired Deputy Inspector of schools)
Mr V Subramanya Iyer ,	(Head Master , Tumkur High School)
Mr C Krishna Rao,	(Head Master , Bangalore High School)
Mr K H Ramaiya ,	(General Secretary Vokkaligar Sangha)
Mr H Sreenivasa Rao ,	(Assistant Conservator of Forests)

The Committee is requested to hold such enquiries as may be necessary to elicit the draw-backs of the present system of teaching in Elementary Schools and the measures for their remedy , and draw up a scheme revising the present curricula of studies in these schools wherever it is necessary and providing practical instruction as referred to in para 1 and submit the same to Government within three months, if possible , through the Inspector General of Education

2 The Committee accordingly held four sittings First on the 24th October ~~October~~ 1910, next from the 22nd to the 24th December 1910, again from the 4th to the 9th October 1911, and lastly on the 29th and 30th December 1911 At the first meeting it was resolved that each member should submit to the Committee a note containing his views on the subject The notes of such members as responded to the resolution are found in Appendix A At the second sitting, the notes were read and discussed at considerable length But before the third sitting came off, the President Mr M Shama Rao , was transferred to Tumkur as Deputy Commissioner At his suggestion Mr V Subramanya Iyer was appointed Secretary and deputed to tour in some of the Districts of the State with a view to making further enquiries regarding local, industrial and Educational conditions His report forms Appendix B At the third session , the Secretary's report was read and the entire subject was traversed in all its important bearings The present report is on the lines determined by the Committee at this meeting When the last sitting was held , the draft , which had been previously circulated , was read and passed with the alterations adopted then Mr B Dasappa's note on the Draft Report forms Appendix C

3 The investigations made by the Committee chiefly turned upon a consideration of the following draw-backs in the existing Elementary Schools

a The purely literary and theoretical character of the curricula which have failed to meet the requirements in life of the pupils of rural schools

b The somewhat antiquated methods of instruction , the unsatisfactoriness of the present system of recruitment of teachers and the inadequacy of the facilities now existing for training them

c The unsuitability of some of the Manuals and School books

4 With a view to remedying these defects and engrafting on the literary curricula as much of practical and elementary industrial training as would ultimately enable the pupils to turn to some practical walk of life , the following recommendations

are made by the Committee

COURSES OF INSTRUCTION

5 All such vernacular schools as provide instruction up to any of the standards noted below, including the IV A, and the VA, which addition to the existing course is rendered necessary by the introduction of Industrial Training, are to be considered 'Elementary'

The Infant Standard		Lower Elementary
I	"	
II	"	
III	"	
IV	"	Higher Elementary
IVA	"	
V	"	
VA	"	

6 Standards IV A, and VA should be opened only in schools in which provision can be made for Industrial Training

7 The Infant and the I Standards extending over two years may be completed, in the case of intelligent pupils and those that have had training at home, in one year

The entire Elementary course will thus extend over 5 or 6 years in schools providing no Industrial Instruction and over 7 or 8 years in schools providing it

8 All such Anglo- Vernacular schools as desire to train pupils for the Vernacular course, should provide a distinct Vernacular course, parallel to the English The former should consist of all the required Vernacular Standards After a pupil finishes the III Vernacular Standard, it should be open to him to elect either the Anglo-Vernacular course or the Vernacular In the former case, Industrial Training will not form part of the curriculum In the latter unless pupils are specially exempted under the Departmental Rules framed in this behalf, Industrial Training should be compulsory

9 The IV and V standards should not be opened in any school unless and until separate teachers are provided for them The

IVA and VA standards should have separate teachers when their strength exceeds a certain number to be fixed by the Education Department , with due regard to local circumstances and the needs of the school

10 In all Elementary Schools, Practical Instruction should be given along with literary But such Practical Instruction , as is purely of an Industrial character , should be given only in those schools that can command the requisite facilities and satisfy the conditions laid down in the paras relating to Industrial Instruction

Literary Instruction

11 In the Infant , I, II and III Vernacular Standards, the existing curriculum should be recast so as to include the following subjects -

Reading Recitation

Writing Spelling Composition (with elements of Grammer)

Aritmetic

Object lessons and nature study (with elements of science)

Drawing and hand work (as in Table I)

Singing , Games , Drill and Physical Exercise

Stories (Including Moral Stories)

Elementary Geography and History

Lessons in Health

12 In the IV, IVA, V and VA standards the following revised curriculum should be adopted

Subject	No of hours per week
Religious and Moral Instruction	2½ hours
Mother tongue	7 "
Arithmetic	4 "
History and Geography	2 "
Science subjects	2 "
Additioral subjects	2 "
Drawing	2 "
Industrial Training (Three afternoon lessons of two hours each)	6 "
Music , Drill and Physical Exercise	Time should be found after school hours

13 In the IV and V standards of schools preparing candidates for the Lower Secondary Examination and not making Industrial

Instruction

Instruction apart of their curriculum , provision should be made for instruction in Manual Training in addition to the subjects prescribed for the Lower Secondary Examination

14 In schools in which Industrial Training is given the Literary courses of the IV and V standards should be spread over 4 years covering the IV,IVA , V and VA standards

15 The science Subjects shall comprise

1 Hygiene (including Elementary Physiology)

2 Elements of Natural Science

3 Elementary Physiography

The additional Subjects shall comprise

1 Book-Keeping (Indian and European systems)

2 Domestic Science (including cookery)

3 Ambulance (for boys)

4 Sick Nursing and Sewing (for girls)

16 NOT MORE THAN ONE OF THE SCIENCE AND ONE OF THE ADDITIONAL SUBJECTS SHOULD BE ALLOWED TO BE TAKEN UP BY A PUPIL AT A TIME

17 The details of the curricula should be drawn up by the Education Department The lines on which such details may be filled in are broadly indicated in table II In ~~an~~ as much as a reform of the methods of instruction and of the direction of the teachers work is more urgently needed than a revision of the curricula adequate provision should be made by the Inspector-General of Education for having the curricula as recast worked according to modern methods of teaching

18 PRACTICAL INSTRUCTION

Up to the III standard , that is , in the Lower Elementary course , Practical instruction should be given by the employment of the Kindergarten and the Manual Training Methods, on the lines indicated in Table I , which is based on the Special Report on ~~the~~ Manual Training by Mr H J Bhabha , the late Inspector General of Education in Mysore

19 In all the standards above the III , that is , in the Higher Elementary course , Practical Instruction should be of an Industrial character and given on the lines indicated below

In those Vernacular schools in which the Industrial Curriculum is not adopted (Vide para 13), the manual Training Course for the Higher Elementary standards , should be that prescribed by the Department and in the Special Report on Manual Training by Mr H.J Bhabha

INDUSTRIAL INSTRUCTION

20 The Elementary Industrial Training proposed to be given in the Higher Elementary Standards should cover a course of four years, which in the opinion of the Committee is the minimum required to enable one ultimately to earn a living For the important Industrial Subjects , the curriculum of four years given on pages 48 and 52 of the Mysore Education Rules , Part II, is recommended And for the rest the curricula should be drawn up by the Education Department in consultation with experts , as necessity arises

21 Such pupils as have completed the lower Elementary course of study in any Vernacular School may, if they so desire, pursue only the Industrial course in any Higher Elementary or separate Industrial School In the case of such pupils the course may be shortened by a year

22 After finishing the Elementary Industrial Course of four years prescribed here, a pupil may proceed to higher or advanced Industrial course in the separate trade or Industrial Schools now existing or to be established in the future

23 The following are the Industries which may be usefully taught , each group being treated for educational purposes as one subject or industry

Group A (a) Agriculture

(b) Gardening

(c) Dairying

(d) Apiculture

(e) Animal production (Breeding and management of live Stock)

B (a) Sericulture

(b) Eri Silk production

6

Group	C	(a) Rope-making
		(b) String work
		(c) Mat and basket making
		(Out of leaves , rushes , fibres with green Semi-carpus Anacardium)
		(d) Bamboo work
		(e) Rattan work
		(f) Coir rug making
—Do—	D	(a) Carpentary
		(b) Black smithing
—Do—	E	(a) Metal (Brass and Copper work)
		(b) Bell metal casting
—Do—	F	(a) Pottery
		(b) Glass -bangle making
		(c) Soapstone work
—Do—	G	(a) Coarse cotton weaving
		(b) Rug making
		(c) Rough Cumbli weaving
—Do—	H	(a) Weaving finer counts (Sadies etc)
		(b) Dying
—Do—	I	(a) Tailoring
		(b) Ordinary Dress-making
—Do—	J	(a) Shoe making and cobbling
		(b) Tanning
—Do—	K	(a) Wood turning
		(b) Toys making
—Do—	L	(a) Book-binding
—Do—	M	(a) Tin smithing
		(b) Wire goods making
—Do—	N	(a) The making of Horn articles
		(b) Cocoanut shell articles
		(c) Arecanut fibre articles
		(d) Brushes
		(e) Walking sticks
—Do—	O	(a) Needle work
		(b) Embroidery

Group P (a) Cookery

(b) Syrup and pickle making

(c) Confectionary

(d) Distilling essential oils

(e) Making farinaceous food stuffs

24 In the selection of any industry for purposes of training pupils in, not only local facilities , climatic and other conditions, but also the economic possibilities of success must be considered , as far as possible

For rural schools group A may be made compulsary

Teachers

25 Seeing that out of every six teachers of Elementary Schools in this Province only one is a trained person, it is highly necessary that more facilities should be created for training literary teachers and that especially in modern methods of Practical Instruction

26 For Industrial Training, while it is indispensable that only trained teachers should be erployed , it is the opinion of the Committee that no separate teachers are required to start with In the existing circumstances of the country, it facilitates the introduction of our scheme to make a selection of such of the literary teachers as possess aptitude and enthusiasm and give them the requisite industrial training to take up the work

27 The Industrial Training for the teachers may be given by means of

(1) Special vacation or holiday courses at select centres, by experts employed by Government or private agencies

(2) Deputation for suitable periods to (a) farms like the Hebbal , (b) Gardens like the Lalbagh, and (c) Industrial schools like the one at Mysore

(3) A course of Industrial Training specially provided in the Normal Schools

28 Wherever it is possible an expert craftsman may be employed for a short time , to teach not only the pupils but also one more of the teachers of a school When the teachers are sufficiently advanced, the services of the experts may be dispensed with

MANUALS, BULLETINS & TEXT BOOKS

29 To help teachers as well as pupils, the Education Department should arrange to publish, from time to time, Teachers' Manuals and Bulletins prepared by experts on each subject, Literary or Industrial Suitable text books for pupils have also to be provided and revised from time to time

DEMONSTRATION AND EXPERIMENTAL INSTITUTIONS

30 Though the question of separate Industrial Institutions is not a subject within the province of this Committee, yet the maintenance of some central institutions for experimental work is considered absolutely necessary, especially for the purpose of training teachers in the latest methods and processes of Industry Such Institutions would also serve for purposes of demonstration occasionally and the Committee cannot too strongly urge this point for the consideration of Government

BONUSES FOR TEACHERS OF INDUSTRIES

31 No regular pay is recommended for the teachers for the present. Bonuses ranging from Rs 20/- to Rs 50/- may be awarded - annually to the most successful teachers of industries

EXAMINATION AND INSPECTION

32 There should be held every year in convenient centres an examination of the Industrial Training given in Schools, by a Committee of three members who shall recommend to the Inspector General of Education such pupils as deserve pass certificates, This Committee should also report upon the quality of work done by the teachers, recommending the deserving ones for bonuses

33 The Committee should be appointed each year by the Local Examination Committee The Committee so appointed, should visit each school if possible, but when the number of such schools is large, it should hold the examination at convenient Centres which should be previously determined by the Inspector General

34 The rules for the conduct of the Examination should be framed by the Inspector General

THE CENTRAL SCHOOL

35 To bring the benefits of Industrial Training within the reach of even small schools , the formation of central schools should be encouraged wherever several small village schools are situated sufficiently near one another , The most central one should be allowed to have standards above the III Vernacular , with the requisite provision for Industrial Training , though the strength of the central school itself may be poor

The grown up lads of all the surrounding villages may, after passing the III standard , join the central school either for further literary instruction or for industrial training

EQUIPMENT

36 To every school that teaches agriculture, two acres of dry land and , wherever possible , half an acre of wet should be granted free The teacher should , with the co-operation of local ryots , and other leading men such as the members of the school Committee , arrange for the cultivation of the land

37 Pupils should , as a rule , provide themselves with all the ordinary tools In the case of exceedingly poor pupils the Inspector General may make a grant for supplying them with tools, but such tools are to be the property of the school

38 To meet the initial or recurring or contingent expenses and to provide the school with such implements and tools as the pupils may not be able to procure for themselves , the Inspector General may , after necessary enquiry , make a grant

PROVISION OF FUNDS

39 For all expenses connected with the Industrial Training of pupils in Elementary Schools the Committee recommend that for the first few years a lump sum grant may be placed annually at the disposal of the Inspector General After gaining experience, specific allotments may be made and additional funds given

10

ALLOWANCES STIPENDS & FEES ETC

40 Such teachers as are deputed to other places for special industrial training should be paid in addition to their expenses

of travelling , an allo ance of not less than half their monthly salary and not exceeding Rs 10/- per mensem , to meet the additional expenses incurred by them

41 To sons of artisans obliged to leave their homes solely to undergo industrial training a scholarship of Rs 6/- a month may be granted for not more than four years for some years to come

42 No fees should be charged for industrial instruction

ARTICLES MADE AND ACCOUNTS

43 Pupils may be allowed the option of purchasing any of the articles made by them by paying the cost of the material

44 The articles made in the Industrial Schools should be disposed of in accordance with the departmental rules for Industrial Schools

45 All the accounts of the Industrial Section of the School should be checked by the Inspection Committee that visits the school annually

GENERAL

46 For the first few years the revised scheme herein proposed , should be introduced only tentatively into a few select Schools where teachers are prepared to undertake the work and where the requisite scope and facilities exist

cfs
2.2.2

Ite Shama Rao

PRESIDENT

Note - A separate page with the signatures of the members will follow for being appended to (Ac Report)

of travelling , an allowance of not less than half their monthly salary and not exceeding Rs 10/- per mensem , to meet the additional expenses incurred by them

41 To sons of artisans obliged to leave their homes solely to undergo industrial training a scholarship of Rs 6/- a month may be granted for not more than four years for some years to come

42 No fees should be charged for industrial instruction

ARTICLES MADE AND ACCOUNTS

43 Pupils may be allowed the option of purchasing any of the articles made by them by paying the cost of the material

44 The articles made in the Industrial Schools should be disposed of in accordance with the departmental rules for Industrial Schools

45 All the accounts of the Industrial Section of the School should be checked by the Inspection Committee that visits the school annually

GENERAL

46 For the first few years the revised scheme herein proposed , should be introduced only tentatively into a few select Schools where teachers are prepared to undertake the work and where the requisite scope and facilities exist

Sd Shamna Rao
Offg Deputy Commissioner, Guntur
& President of the Prantiya C
Secondary Education Committee

C Krishna Rao
K H Ramayya

M. Ramanaramayya

Subject to my views expressed in the note of dissent already submitted to the committee
BD
13.3.72

P Ungaiah

N Damodaram

H S Kumaraswami Rao

V Subrahmanyam
Secretary

Cane-working and basketry Card-work

Sand tray work	(1) Forming letters with a clean finger in clean sand. (2) Illustrating land and sea, Sea coast, hills, ---- mountains, r vers, tableland and volcanoes.	(1) Illustratin Geographical te (2) Plans of th house School g surroundings
Paper folding	Folding of simple forms of objects.	(1) Folding of difficult forms objects (2) Folding of
Paper cutting		Cutting of sim forms, Free c well as drawi ting to be pr
Card board work		
School gardening	Gardening (Three periods of 15 minutes each)	Gardeni (Two half ho

Akhm. x A

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	(1) eaving of bamboo chicks and mats (2) ope and net weaving	(1) eaving of bamboo baskets (2) Making of ornamental flo er baskets of coloured rushes and grasses (3) Making rattan trays
re chool- ard	(1) Peresentative scenes of an Indian village of a tank and fields of pasture lands (2) Representation of caves forests &c	(1) Representative scenes of (pastoral life (b) agricultural life (2) Representation of a Geogra phical area or province
re --- -- ts		
ect ing as cut-		
		First year s course as iven in Rich's book on paper sloyd (Two half hours)
	Gardening (Two periods	Gardening (Two periods)

Appendix A

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(4)

Mr. M Ramaswamayya's
"Note on the Place of
Manual Instruction
and elementary agri-
-culture in the school
curriculum

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The paramount need for the inclusion of manual work & elementary agriculture in the Elementary School curriculum

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I The paramount need for the inclu
of manual work and elementary
agriculture in the elementary s
curriculum

· physiological and psychological grounds

The claim for the inclusion of Manual Instruction as an integral part of the Elementary School curriculum is based on physiological and psychological grounds

"From 7 to 14 (or even 16) years of age a certain suppleness, knack or dexterous familiarity with the pencil or any implement may be acquired which diminishes with succeeding years This principle is equally true of memory and quickness of perception" (View of Mr. Charles Godfrey Leland, the American Educator)

"Child study in recent years has revealed the scientific basis of Mr. Godfrey's dictum and the Educational

Value of all handwork the mind
that of the body and grows by bo
exercise precisely as any other par
of the body, and the ages from 7 to 14 or
16 are invaluable for building up
the structure of the mind as of the
trunk and the limbs If then we
neglect due exercise of the hands, as
the body generally, we will not only
deprive the child of its birthright,
manual dexterity, but are in danger
of even stunting its intellectual de
-velopment Thus the introduction
Manual Training into Elementary
Schools will not hamper but posi
tively promote intellectual develop
-ment" (Views of Mr G Legge, B A
Director of Education Liverpool)

"The Board of Education in the
recent Memorandum on Manual

Instruction in Public Elementary Schools also observe as follows –

"The effectiveness of Industrial Schools, both in our country and in the United States in forming character and giving a training for life, has been often noticed It undoubtedly depends largely on the great ~~[illegible]~~ prominence given in these institutions to manual and practical work, and we would associate ourselves with the opinion often expressed that the education hitherto given in the ordinary Elementary Schools has not been in its fullest sense practical We believe that with the introduction of good Handwork methods the literary side of the education would also become more real and better appreciated

main objects of manual work in Elementary Schools

The main aim of manual work in an Elementary School is

"(1) To develop certain centres of the child's brain

(2) To afford scope for acquiring manual dexterity at the age when such dexterity must be acquired, if it is to reach the pitch it should in maturer years

(3) To afford scope for self expression (i.e. for exercising the child's constructive faculties)

(4) To make other school subjects more real to the child by connecting or correlating hand work with them

(5) To keep the child in touch with its environment by giving it some thing to do which it recognizes as real and useful (Toys, baskets, mats &c)

It is not possible to have one uniform scheme for all schools neither can we accomplish all with one kind of material

one tool or set of tools We need several sets of exercises in different materials, each tended to carry out the main purpose in view In short we must give the utmost scope to freedom, largely initiative on the part of the teacher and the pupil

3) Stages of Instruction
(a) The Infant stage or class
(b) The junior stage or lower classes
(c) The Senior stage or higher classes

The Stages of Instruction in our Elementary Schools comprise the following

(a) The Infant class or stage
(b) Lower classes or the junior stage
(c) Higher classes or the Senior stage

The Infant class in our schools corresponds more or less to the Infant or Kindergarten Schools in Europe and America This class should consist of at least, 3 sections for children between 4 and 5 5 and 6, and 6 and 7 years of age The list of varied occupations suitable for children of this age is given in the Appendix

At this early age it is not possible "to treat handwork as a separate subject or to give special lessons to increase the child's manipulative skill The handwork, like the drawing arises naturally from the child's thoughts and observations"

The lower classes (Vernacular I II and III ~~AV~~ IV) generally contain children between 7 and 10 or 11 years old "The manual work here will mainly follow the lines of the Infant class, of course with modifications due to the greater strength and skill of the scholars, also the greater variety of material used in their instruction There should be great latitude for independence and originality on the part of the teacher Initiative on the part of the pupil should also be encouraged

There should often be closer correlation with the rest of the curriculum (Vide Appendix for Manual Exer-
-cises suitable for the classes)

The Higher classes include Vernacular IV and A V II, Vernacular V & A V III, and A V IV & V. The ages of children vary from 10 or 11 to 13 or 14 years. The course of instruction in hand work should be continuous from the lower to the Higher classes

"This is the period of transition when a stricter intellectual discipline must be exercised and the interests of after life should be taken into account. At this stage it is desirable in the case of boys to give a distinctly in-
-dustrial bent to their Manual Training

(4) Industrial or Trade Schools for boys aged 14 years and upwards

The extension of the Scheme of starting more Industrial or Trade Schools in important centres of the State to meet the needs of boys coming from Elementary and Secondary Schools furthers the technical instruction. The Trade Schools which will be open to boys of between 14 and 17 or more years of age are likely to prove a blessing to the country. Students whose school career is not successful as those who have passed the Lower Secondary Examination, besides many others, will have an opportunity of learning a trade and earning their living. At present there is an army of them who having no employment are idle

the provision of technical education for them makes them economic and productive units of the State

(5) Feasibility of providing for manual work and elementary Agriculture in the School Programme Also distribution of time between the literary & practical sides of education

The value of manual instruction and elementary agriculture in the elementary School course can hardly be overestimated now the question arises whether there is not already an overcrowding of subjects in the elementary School programme and whether the inclusion of these practical work is not likely to prove prejudicial to the interests of the literary subjects From a perusal of the subjoined table showing the distribution of time between the literary and practical sides of education it will be manifest that by providing for handwork, the period of time devoted to the ordinary subjects will not be materially lessened

only the boys of the English classes have an hour's extra work ~~Every day~~ ie for 5 hours in school they will have 6 6 hours' work is not to be considered taxing in view of the fact that — drawing, gardening and other manual occupations are exercises in which children take a delight. The pre-duction in the portions of Geography in which at present a little too — much is expected is, however, a desirable change

Serial No	Subjects	Infant class Number week 22	I	II	III AV I 27+6	IV AV II 30+6	V AV III 30+6	AV IV 30+6	AV V 30+6
			28	28					
3	**Literary Subjects**								
1	Moral & Religious Instruction	1 hr	1	1	1	2	1½	1½	1½
2	a Language	3	4	4	4	4	4	4	4
	b Grammar	–	–	1	2	2	2	2	2
	c Writing	–	2	2	Home work	H W	H W	H W	H W
	d Dictation	2	2	2	1	1	1	1	1
	e Composition & Story Telling	2	2	1	1	2	2	2	2
3	Arithmetic	3	4	4	4	4	4	4	4
4	History	–	–	2	2	2	2	2	2
5	Geography	–	2	2	2	2	2	2	2
6	English	–	–	–	6	6	7½	7½	7½
	Total	11	17	19	23	25	26	26	26
	Practical work:								
1	Drawing	2	2	2	2	2	2	2	2
2	Manual occupations								
3	Gardening	5	5½	5	5	5	4	4	4
4	Elementary Science and common things	2	2	2 practical agriculture	5 4 practical agriculture (elementary)	4	4	4	4
5	Needle work, Domestic Science & Music (for girls)	To be taken for Manual occupation from the III class upwards							
6	Physical Exercises & Games and songs for Infants	2	1½	2 of 5	out of school hours	–	–	–	–
	Total	11	11	9	12	11	10	10	10
	Grand Total	22	28	28	35	36	36	36	36

[illegible] in IV & higher

Place of nature study and elementary agriculture in the elementary school

With regard to this topic, the educational reformers in North America are divided in their opinions. "Some maintain that as soon as possible, the indiscriminate study of the whole natural environment should give place to the definite study of elementary problems bearing on agriculture. Others hold that elementary agriculture should be reserved for the secondary school and that the wider nature study should alone find a place in the elementary school curriculum." There is no doubt that nature study if conducted by intelligent teachers who have nature love and nature knowledge will produce excellent results. But in the hands of the

an intelligent teacher who has taken reckoned with the teaching of nature study is apt to become lazy and unmeaning

The causes, however, apparent in regard to agriculture "It has the merit of definiteness and insures exact scientific treatment. It cultivates the active and creative instincts, gives experience of failure and success and connects the school with practical life"

The early introduction of agricultural studies is therefore desirable, especially, in an agricultural country like Guyana where children in ... parts leave school very young. In America, the teaching of elementary agriculture is being encouraged

in rural Schools In our Schools also the subject may be taught from the II class upwards At present theoretical lessons in agriculture are given to children in the III and higher classes of our Schools The teaching should be made practical also model courses of Elementary agriculture should be drawn up and issued free to all rural Schools in the State as has been done in America

6 considerations regulating the choice of manual occupations and some types of hand work specially suitable to Elementary Scho the C

" Apart from its suitability to the circumstances of the children and the neighbourhood of the School an occupation ought to satisfy the following conditions

(1) It must be creative and should specially stimulate independent effort and inventiveness

any work that provides a real training for hand and eye is in a true sense formative but the most valuable work of all is that which imparts a knowledge of form colour and the properties of the materials, at the same time that it fosters manual dexterity

(2) It should admit of being dealt with in a progressive course

(3) It must be attractive to the children and afford a welcome relief from other studies

(4) It must not involve the use of needlessly ~~ex~~ expensive material

(5) It should avoid a large series of preparatory exercises apart from finished results, and the finished article should be one

that is attractive to a child

Appendix B contains some typ
of hand work especially suitable
for Elementary Boys School in
the State

7 Practical arts for Girls Schools and Curtailment of the curriculum

The practical subjects for girls
should include, Music, needlework
Home Economics and physical
culture To provide for these items
is necessary to reduce the portions
in the literary subjects Grammar
History may be left out in the II class
In all the classes the portions in
Arithmetic History and Geography
may be curtailed

8 Are the pupils in a school to be taught one occupation or more than one?

To my mind it seems to be
desirable not to restrict the choice
of the occupation of any year to one
work alone Let me take one or two
concrete cases to show how it is no

possible to lay down any hard and fast rule on the front clay modelling is a very useful occupation leading upto pottery in higher classes It is of great service in the teaching of especially Geography The teacher does not, require any technical knowledge the children can pick it up easily and more than all, the material used is comparatively inexpensive Paper works a common occupation suitable for illustrating Arithmetic and Geometrical shapes We grasses such as available, mat-plaiting can easily be practised in addition to clay modelling an weaving of textile fabrics, the latter of which it is a preliminary course ~~an advanced~~

(9) Approximate cost for the equipment of a School working to teach some specific occupations

Appendix C gives the approximate cost of equipping a School for teaching cloth weaving, Rattan work, and weaving of mats out of local grass or rush

(10) The consolidation of small rural Schools into large more efficient ones

The consolidation of Schools means the uniting of two or more inefficient schools into ~~one~~ a large central one, for the purpose of securing both increased numbers and better educational opportunities. In the United States and Canada, the movement of consolidation is proceeding rapidly and has met with marked success. After consolidation the enrolment and attendance have gone up. Public interest in rural education has been awakened. Besides the consolidation has

facilitated the employment of competent teachers for elementary agriculture and manual work. In Mysore where there are many poorly attended inefficient rural schools for boys, the experiment of consolidation may be tried with advantage - at least in a few places within a distance of 6 miles. A building having a spacious compound may be put up by Government in a central place of course with material help from the people.

11 A manual room recommended in large schools at Taluk stations for practical

It is most desirable to provide at a moderate cost a separate manual room for practical work in all large schools at Taluk stations. The room may be locat

in the School premises The use
of zinc sheets will lessen the cost of
the room and save the trouble
of annual repairs

II The Training of Teachers

(1) The crucial point in all educational reform

The crucial point in all educational reform is the training of teachers. No one can give good lessons in Elementary agriculture, manual work and Home Economics without special training. Training should not only prepare teachers in the science and art of education but also awaken in them a keen interest in the actual life of the present day.

i) The ~~undesirability~~ [illegible] of postponing the introduction of manual work, &c for want of teachers

ii) Systematic arrangements required for training

There is no doubt that the number of trained teachers is few. But the lack of them should not be taken as a sufficient reason for postponing the introduction of the subject into the elementary school curriculum. In view of its importance strenuous efforts should be made to train the present generation of

of teachers and also train up a new generation capable of successfully dealing with the problem as a whole

(c) Special encouragement of hand work by making it one of the optional subjects for the local examinations

A knowledge of hand work should form an element in the training of all future teachers. Instruction in hand work may also be encouraged by permitting candidates for local examinations to take up manual work as an optional subject

(3) Facilities for training in Hand work and Agriculture

(a) Existing facilities

Among the existing facilities for training in hand work and practical agriculture may be mentioned the following

(1) The three Government normal schools at Mysore, Kolar and Shimoga. At present the Mysore Normal school alone is well-equipped for the work. The other two institutions need to be equipped also, if funds permit, for

the Upper Secondary course

(2) The ~~Summer~~ winter course held annually for the last two years in the Government Normal school Mysore, for imparting instruction to teachers in Kindergarten principles and manual work

(3) The Summer vacation classes at the nine manual Training centres to teach teachers paper sloyd At these centres it may be conveniently arranged to give a course to them in light wood-work also

(4) The twenty Industrial schools in the Province At most of these, a large number of teachers and pupils may receive lessons in wood-work metal work, drawing, weaving, Dyeing cord work Reel and brush work &c

(5) The Government Agricultural Farm, Mysore. Here Practical

agriculture is now being taught to select students of the Normal School

(6) The Maharanees College, the Wesleyan Mission, Victoria Girls school Mysore the Wesleyan Mission Normal school for girls, Bangalore and the Wesleyan Mission girls school at Hassan and Tumkur. At these there is commencement for a Domestic Science course for lady teachers

(b) Proposed facilities

(1) First of all, the equipment of Anglo-Vernacular schools at Taluk Head Quarters for teaching manual work and practical agriculture and gardening

(2) The periodical training of rural teachers in well-equipped and well-conducted A V School

(3) The formation in connection with the large and important A V schools, of well-organized lendin

school libraries containing standard works both in English and Kanarese on Hand work gardening elementary science, Practical Teaching and organization &c The libraries are for the benefit of the teachers in the schools of the Taluk

(4) The institution of more scholarships for technical education Deserving Graduates and Head and Assistant masters of Anglo-Vernacular schools may be granted scholarships to take a course of instruction in a technical school in Bombay or elsewhere Teachers trained in Special schools are likely to give an impetus to the progress of Manual Instruction in these schools

(5) The increase of the number of stipendiaries in the Normal schools in the view to get more teachers trained than hitherto

(6) The opening of an Upper Secondary department for girls in the Maharani's College, Mysore, to supply the want of competent head mistresses required for important middle schools for girls

(7) The making of provision for a Domestic science course for lady teachers in the Service

(8) The establishment of an agricultural College at Bangalore or giving a course of instruction in agriculture and gardening to teachers and others There is already a Government agricultural Farm If feasible steps may be kindly taken to make it an adjunct of the proposed College

(9) The appointment of agricultural Inspectors to superintend gardening and Practical agriculture in the

public schools of the State

(10) The arranging for the supervision of Manual Instruction in schools by Sloyd supervisors as

(4) Whether Specialists or ordinary teachers should take up the work of teaching Manual Instruction and Practical Agriculture

It is most desirable that all Manual and Agricultural Instructors should be ordinary certificated teachers, many of whom have a considerable capacity for the work. Hand work is to be regarded as an educational method rather than an isolated subject. A trained teacher knows educational methods and primary

will be better able to teach the subject in a progressive and scientific manner than an untrained teacher or artisan, in whose hands the teaching is likely to become mechanical. A specialist with a sound knowledge of educational methods and principles would be a capital teacher. However, as a temporary measure artisans might be employed for the work.

(5) The payment of allowance or increased salary to Instructors in Manual work and Agriculture

Manual Instruction and elementary agriculture are important subjects which are to be taught by an enthusiastic certificated teacher. It is but fair that some encouragement in the shape of allowance or increased pay should be offered to him for this work. To regard it as a part of his regular routine will not make for efficient and satisfactory results

(6) Is the teaching of manual work and elementary Agriculture to be compulsory or optional?

There are many teachers who have no special interest in the work and are incapable of dealing with the subject. There is no use of entrusting the work to them who will do it perfunctorily and will not help to make the experiment a success. It is therefore not feasible to make it compulsory for the present. It should be allowed to spread gradually, as teachers become available. But the value of manual instruction and elementary agriculture in all schools should be recognized by Government. Every facility should be afforded for training teachers in the subjects at the Normal and Industrial schools, all manual training centres, special girls' schools, and the Agricultural College or Farms in the State, as also at Technological and Agricultural

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Institutions outside the Province. Special Summer and Winter Courses may also be held for the purpose. The successful solution of the problem depends on the encouragement of Government, as also on the staff of workers who are to grapple with all sides of the question with zeal, confidence and courage.

7) Materials and Text Books

Government have to arrange for the publication of suitable text books on the subject. As for materials, as far as possible locally available articles should be made use of in teaching an occupation. In all places where Industrial Schools exist arrangements may be made with the managers for teaching wood work, weaving and other occupations at a small cost to Government. In other centres

it is not possible to teach wood work or weaving unless Government bear the initial cost of tools implements and materials, and also lend a helping hand to the schools now and then by way of supplying wood or yarn free of charge. The teaching of cloth weaving in schools, however is not likely to become an expensive affair, since the sale of the articles made by children will bring back some capital.

8) Suitable working hours for small rural schools

The present working hours viz, 7 to 10 in the morning 3 to 5 in the afternoon are no doubt convenient for all practical purposes during dreaming all the seasons of the year except when ryots are engaged in agricultural operations. It is generally during the sowing, reaping, and harvesting season that farmers specially need their children's help to tend sheep or cattle

At such times the holding of the school ~~only~~ in the morning alone from 7 to 10 or 10 30 for periods varying from a fortnight to a month serves the purpose. If this arrangement which should suit local conditions meets with approval, all village schools will have full time work in summer when cultivators' children have no special engagements. To hold the school from 7 to 9 in the morning as proposed is all right. But to continue the work from 4–6 in the afternoon appears to me not practicable. The school-children are not likely to return home for their work before 6 P.M.

[illegible]

Appendices

Approximate annual cost for the equipment of an ordinary weaving class of about 15 pupils

Items	Quantity	Rate			Amount			Remark
	~~6~~ 3	~~5~~ 3	-	2	~~30~~ 3	-	-	
Reeling machines	6	5			30			
Hatte machines	4	3			12			
Pirn Winding machines	6	5			30			
Reels	200		1		12	8		
Hatte	25	-	4		6	4		
Pirns	500	1 per hundred			5			
Tape machines	3	2			6			
Sash machines	3	2		-	6			
Handkerchief machines								
(1) Pit Looms	2	3			6			
(2) Pit fly shuttles	2	6			12	-		
Carpet looms	2	5			10			
Healds and Reeds	Lump Sum				20			
Heald sticks, draft needle, &c		do			5			
Total					160			
Recurring charges								
Repairs					10			
Extra Healds &c					5	-		
Yarn thread (Initial cost)					100			
Total					125			
Grand Total					About 300			

1

Mats for one Room

Talkad mat –

	Rs	as	p
(1) For haragasu (reeds) —	1	4	–
(2) For bamboos		4	–
(3) For coconut nails --		4	–
(4) Cord for tying the loom --		2	–
(5) Flax thread -		6	–
(6) Teak wood plank		6	–
(7) For a knife &c		14	–
Total Rs	3	8	–

Kadahola mat –

Materials same as for Talkad mat &

(8) colour & one more knife wanted which cost about a rupee more

THE D... No ... Dat ... MYSORE

73

Rattan

List of materials and the probable cost for a Rattan Class of 12 boys

Initial charges

		Rs	as
A	12 Dealwood boxes (1½x1¼x¾) to sit on —	3	-
B	Three wooden pieces for drawing strings -		12
C	Three deal wood boxes to fix B		12
D	Screws for fixing B		2
E	Country knives (thin) for 18 @ 2as each -	2	4
F	- do (thick) for 2 @ 4as		8
G	Fine English made knives 2 @ Rs 1/8 —	3	-
H	Country needles for 12 @ 2as each -	1	8
I	- do - (Small) do @ 1as 6p each -	1	2
J	Hammer		12
K	Footrule (of two feet)		12
L	A pair of pincers	2	-
M	One oil stone	2	-
	Total	Rs 18	8

Monthly recurring charges

(a)	Rattan (1st quality) for 24 lbs	Rs 8	0
(b)	Wax for ¼ lb	0	4
(c)	For repairing instruments -	0	8
(d)	For a screw file	0	6
(e)	For cocoanut oil &c		2
	Total	Rs 9	4

T Venkatarao
H M Master

List of varied occupations, suitable for Infant classes

For children between 4 and 5 years of age

Games with music
Games without music
Recitations - nursery rhymes etc
Picture Lessons (learning to answer in complete sentences as to what they can see in a picture)

Sand modelling
Paper folding
Mosaic with coloured cubes
Drawing
Matching colours (picking out the same shade of wool from a heap of remnants)
Plaiting paper

Working patterns with needle and worsted
Threading beads in twos, threes, etc
Arranging shells in twos, threes, etc
Arranging sticks of number with cubes

Card building

For children between the ages of 5 and

Games with music
Games without music (guessing games, etc.
taking messages)

Picture Lessons

Object Lessons
Story Lessons
Recitations
Paper folding
Palm Leaf work
Mosaic with coloured paper, use of gum
Drawing

Planting peas
Building of object forms with pith and stick
Stick, ring & string laying
Ruling simple geometrical forms
Measuring length Estimating length
Weighing Estimating weight
Setting a table (carrying a cup of water without
spilling it, moving cups without
breaking them)
Modelling in sand & clay
Basket work
Cutting out patterns & shapes with scissors
Wood building
Number pictures with cubes beads seeds, shells,

ebbles, cowries, marbles sticks etc)

Note. The Inspecting Officer may permit any teacher to select any other occupations, if found necessary. The above are mentioned as some of the occupations suitable for children of other ages. It is not expected that all these occupations should find a place in the School ~~time~~ Programme

Practical arts for girls

(1) Needlework Plain Sewing & Embroidery, Knitting and Tailoring

(2) String work - Making of Silk or cotton strings, bags, purses etc

(3) Weaving Yarn bottom Rough Tape, cotton Sa. etc

(4) Chunk work & Lace work

(5) Artificial flower-making

(6) Basket & Rushwork also Strawwork

(7) Palm Leaf work

(8) Toy and doll making (Out of Rag paper, straw wax wood, pith rattan, et

9 Wax work

10 Rangavalli drawing

11 Bead & wire work

12 Peacock Feathers & these are put to various uses

13 Embellishing and draping pictures

14 Stock raising & Dairy farming

15 Household matters - (1) clothing, Food & Habitation

(2) Care of the old and of children

(3) Nursing and Prevention of Infectious Diseases

(4) Management & Economy

(5) Ambulance work

(6) Sanitation

Music (1) Vocal (a) See Household songs
(b) Scenic music
(2) Instrumental

Some types of handwork suitable for Elementary & Secondary Schools

I (a) Sand modelling for Infants & Lower classes

(b) Clay or Plastic modelling leading up to Pottery For all classes

The educational value of modelling is undisputed It is specially helpful in the teaching of Geography, Object Lessons etc Pupils who have gone through a course of clay modelling in the lower classes learn pottery easily in the higher classes One of Bone white clay available at Melbo & elsewhere China ware may be made Tile making may be practised ~~and~~ where clay needed for it is available as at Mad.

(c) ~~Papier mache~~ Paper mache (made of boiling down newspapers) & a material made of a mixture of flour and Salt are used in Geographical modelling at various schools in England

II Paper work The various types of T are

(1) Free cutting & Cutting into scissors or outline This work may be done in Infant class and also in higher classes up to II

(2) Paper-folding. This is a common

occupation It is suitable for illustrating arithmetic and geography

(3) Paper-plaiting For lower classes

(4) Paper modelling A combination of Paper folding, cutting and pasting and Cardboard modelling, forming an transition to real round modelling.

(5) Paper Jointing (Practised in Japan) By means of this strong cords can be made Jointed models for III

III In connection with II and in place of classes out of Straw hats, plates, trays, small baskets shoes, bags etc are made

IV Cardboard modelling Its aim is to aid the teaching of arithmetic, and chiefly to afford a preparation for wood work Suitable for children of classes II & III

V Light wood-work. A simpler form of this work known as Strip-work may be done in vernacular class II by children of 8 and 9 The work involves sawing, nailing and gluing prepared strips, bits not points of any kind Its object is to represent articles of furniture etc. ~~Light wood~~ Wood-work may be approximately taught

from class VII upwards

Comb & button-making (Light wood, horn, bone, ivory shell, pearl sand

VI Weaving There are many kinds among which are

(1) (a) Rabba work A course of practical work in wondna weav plaiting & sewing this material Rabba is a kind of palm leaf

(b) Indian Palm Leaf work For Low and higher classes out of this

fans, baskets, water-buckets, mats, Ja Ear-rings, Betel boxes, flower-baskets boxes for Saffron etc, Culinary boxes, are made In short it has been put to numerous uses in the Southern parts of the Madras Presidency

(2) Bamboo work

(3) Reed, Rush and fragrant grass (ooshi) work

(4) Cord work coir & other fibre weaving & Rugs

(5) cloth & Tape weaving, (cotton, wool & silk also dyeing

(6) Jute, Hemp & Flax work

VII Cane work

VIII String work, consists of Crochet, knitting and netting, knotting & splice and macrame work This occupation enables pupils to make such useful articles as cotton gloves watchchain money ~~purses~~ purses, book cases nets hammocks, etc

IX Lacquer work Toy work & ~~Wood~~ making of musical strings or chords at a place like Chemapatna, these occupations are serviceable

X Sericulture for special parts of the Province where Silk-worm rearing is an ordinary occupation

XI Metal work & casting for places like Shravana belagola, Nagamangala Halagur For higher classes

XII Tinning & Soldering

XIII Tailoring for cities like Bangalore & Mysore It will be useful in villages also

XIV Book-binding, Business correspondence and Banking for Bangalore & Mysore

XV Apiculture or Bee-keeping for Malnad & Kadur especially

XVI Wax work

XVII Stock Raising and Dairy Farming for rural parts This may form part of agricultural lessons

XVIII Tanning & Leather work Also making of useful articles out of bone and horn Suitable for Mahomedan & Panchama children At present very little use is made of bone and horn especially in villages

XIX Ambulance work for children of classes IV + V in schools and out Headers Also wherever instruction by a medical officer is available

XX Sandal wood carving & Inlaid work for places like Sagar & Sorab Elementary carving is quite possible in higher classes IV + V

XXI Fret work for higher classes

XXII The process of extracting oils from varieties of oil-seeds

XXIII Making of country glass articles angles

Answers to the questions formulated in the first meeting of the members forming the committee for considering the question of Agricultural and Industrial education in elementary Schools.

Answers to Several questions

II (a) In this question the two words conveniently and usefully require first attention. The first word suggests that those industries for the promulgation of which facilities exist are to be selected: the facilities being one or more of the following viz ——

(1) Easy obtaining of raw materials required for the industries

(2) Those which can be easily taught

(3) Industries which boys are most willing to learn

2. Taking the first it is necessary

in choosing an industry for any particular school to select only those which depend on the raw materials easily procurable in the place, such as, coir industry for schools in the Tapleir and chuk mayakanhalli taluks mat making in places bordering on rivers where sedge grass is available carpentry for schools near the timber forests Syrup making and distilling scents where fruits and flowers required are abundant wicker work where bamboo cane and twigs are easily procurable Dyeing where dye stuffs are abundant

and so on

3 Secondly, the industries are to be easily taught

4 Thirdly the boys must be willing and capable of learning the industry selected for teaching For example in places where high caste boys predominate they may not be willing to work with hides and learn tanning Similarly where only very young boys are found any industry may not be possibly taught

5. Religious scruples must be respected in regard to selection of industries and such of them

or parts of them as are against religious ideas may be eliminated For example a high caste boy should not be asked to learn shoe-making or the making of leather ropes (తాడు) and none of them ought to be forced to cut up the carcass of a dog or cow to use the flesh as manure

6 The Second word usefully implies that the industrial articles turned out may be fit for home use or for the market e they are to be useful from a commercial point of view In institutions where young boys are made to pick up the rudimentary

knowledge of industries I think it cannot be made a commercially paying concern The industries are more educative than commercial But under the plea of mere education the commercial side ought never to be disregarded The final object of teaching industries being then commercial importance the commercial aspect of which should always be borne in mind and the articles produced should as far as possible be fit for home use and local consumption

7 So far as is known to me the following are the probable industries which can be taught in the

Elementary Schools

On the Girls' School for girls of 10 and above

(1) Syrup making, jellies pickles & confectionery

(2) ~~Hassan~~ Knitting cap making

(3) Mosquito curtains punkas and embroidery

(4) Stitching coats and shirts &c – Tailoring

(5) Making fans

(6) mats and Mattresses

(7) Distilling essential oils from plants, flowers &c

(8) Kitchen gardens

(9) Making baskets out of bamboo (ಕೂಡೆ ಮಾಡುವುದು)

(10) Making farinaceous food.

– Stuffs &

On boys of 12 years and above

(1) Bamboo and cane work

(2) Brass and copper works

(3) Buttons of coconut shell

(4) Candles

(5) cigars and cigarettes

(6) Screens and checks add

(7) Enamelled ware

(8) Essences, scents and perfumes add

(9) Rugs and other manufactures of fibres including ropes and strings

(10) Furniture

(11) Horn works such as comb knife-handles and buttons &c

(12) Iron and steel works

(13) Lac work preparation of sealing wax and lacquered ware

(14) Weaving cloths Sadees, towels and bed-sheets tape, webs and curtain cloths &c

(15) Picture frame making

(16) Gilding

(17) Porcelain pottery and tiles of different kinds and glazed ware

(18) Umbrella making

(19) Walking sticks

(20). Wire goods

(21) Dyeing yarn

(22) Making mats and mattresses

(23) Plantain fibre and grass (ఒళ్ళు లేదా తుంగ) vessels and ropes

(24) Areca nut fibre ~~and~~ carpets

(25) Soap-making

(26) Making soap stone pots ఇత్తడి (ఇత్తడి)

(27) Brush making

(28) Practical agriculture

(29) Tanning

(30) Making clothes water-proof

(31) Tinkers work

(32) Handloom and blanket works

11 (b) 18 The boys who assemble in the School for primary education are of different castes and grades of mental development and of different trades or professions they naturally inherit in some degree knowledge of their parent professions and may likely differ in castes and aptitudes Therefore no single industry could be made common to all the boys of a School whereas considering the other side it seems to be quite impracticable to teach several industries in each School at one and the same time A medium course has therefore to be chosen Arrangements are to be made to teach two industries at

light — and one middle class industry

9 Agriculture being the chief occupation of over 75 per cent of the people here it is needless to say that its improvement is of great importance Its development is all the more desirable when we consider that successful agriculture gives rise to a number of industries which directly or indirectly depend upon it Therefore a country agriculturally great cannot but be an industrial one also Silk cotton indigo and other dyes various fibres oil seeds. Sugar cane &c all give rise to numerous industrial occupations by which people make their living It is therefore of utmost importance to educate people

in the higher modes of cultivation and create an interest in that art by proving that cultivation may be so improved as to secure greater profits than now. The ideas of improved methods of cultivation are to be impressed on the young minds. Agriculture being a profession not objected to by caste rules it has to be made compulsory in all the elementary schools. It being a purely practical art the theoretical instruction given in the class room has to be practically demonstrated in the field. Purely theoretical instruction now imparted has been fruitless, and to be beneficial it is to be largely supplemented by practical instruction

with regard to other industries, the list has to be a fairly large one to suit people of different tastes and means and it must be left to their option to select any of them viz one light industry for 3rd class boys and one middle class industry for 4th and 5th class students or for the special course in Schools where the 3rd class is the highest as suggested further on Those selected by the students must be made compulsory

11 It is better if the industries chosen are such as may form the means of livelihood for the majority of the students

12 A real knowledge in any technical pursuit is the outcome of generally of a long period of personal experience II (d)

acquired by being born in a family practising that profession while so I am less inclined to think that any ordinary school master can pick up all the internal and minute details of any one profession during a short course of instruction which he undergoes unless he has enough zeal and thinking power to master the details The general tendency of a man in any particular walk of life when made to get experience of professional other than his own is to acquire a superficial knowledge of it so as to be able to pass the prescribed tests But real solid knowledge is something more than that required for passing examinations and it can be acquired

only by birth-right or by searching and thoughtful study. Men of the latter class are very few among the elementary school masters though honourable exceptions may exist & am therefore of opinion that the short course of training which the school masters undergo may not make them efficient teachers of industries of which they have no experience by birth & it may not therefore be of much help to the success of the scheme. Even if it is to be adopted it will take a long time to train the staff and a regular Normal school has to be estab.d at considerable cost besides incurring an additional expenditure to keep the elementary school running

during the teachers' training period delay and inefficiency may therefore be the result of trying to train the existing masters I think it therefore advisable to procure efficient men now following such professions to teach Most of such men may not have the literary education and may not be able to understand or teach the theoretical part of their professions but this is no great drawback as very little of theory can be imbibed by the young boys in elementary schools Persons employed as foremen or Maestries in factories or intelligent men now living by those professions have to be secured on payment for teaching

then special arts those having literary qualifications among them maybe preferred to others Even in large industrial concerns it is generally such men that do all work and understand the minor details better than those above them Therefore such men maybe more useful for our purpose where men of special aptitude are found among the school masters they may also be sent to industrial centres or special schools for training

13 When the specialists impart II (e)
instruction to the students the teacher must take notes and practically learn the craft so, as to be able to pass a practical examination of higher standard

in that particular art. The school master on passing such an examination may be allowed to teach that industry himself without the aid of the specialist. Any teacher who so qualifies himself to teach may be given an allowance of a rupee or two for every industry he is capable of teaching. By this system the temporary establishment of specialists may gradually be reduced.

14. Those who teach industries whether specialists, men or teachers may be paid a bonus of Rs 5/- per every student taught by them if he stands the tests of an organized examining body or

better still when he passes the Madras Technical examinations in that industry

15 It may be necessary to establish an examining body for the technical subjects and to grant certificates for proficiency These certificates should be valued in the selection of teachers for the lower standard schools and in selections for employment in public service where such knowledge may be useful when sending applications for the Lower Secondary examination it is desirable to make the production of this certificate compulsory as the vaccination certificates are at present Better than this would be to replace two of the now optional subjects of the Lower

Secondary examination Vs ~~Geometry~~ and any other of liberal subjects and Hygiene by industries as suggested further on

II (b) 16 of the present curriculum has to be left unaltered, the introduction of practical agriculture and industries is impossible for want of time. The school curriculum as it is at present is burdened with subjects of which some can be more usefully replaced by industrial ones. Even among the necessary subjects portions of some can be curtailed and the number of hours allotted to others has to be modified if practical instruction in the technical subjects has to be introduced. How it can be done is described under question (H)

In some of the institutions among the elementary Schools even the fifth or Lower Secondary class is established while in many the literary education ends with the eighest upper primary or 3rd class Taking that boy enters the infant class the 6th year and that he secures yearly promotions he will be in the 3rd class in the 9th year and in the Lower Secondary in the 11th at the earliest It is difficult to teach even light industries to boys below 10 as they would not be fit for grasping the methods taught, and as they are wanting in application at that age In this consideration teaching of industries in Schools where education ends with the 3rd Class

II (page

does not appear to be feasible

But in practice, boys in each class are on an average older by at least two years as compared to the official age assigned to them above Therefore boys in the 3rd class are about 11 and those in the 5th about 13 Regular industrial and agricultural education may for this reason commence with the 3rd class

18 Under this scheme the boy will have only one year of industrial course in schools (where education ends with the 3rd class, while those schools having the Lower Secondary class have three full year course In order to raise the Standard of

Industrial and agricultural education in both the kinds of schools equal it is suggested to enforce a special training of one year in agriculture and industries in the former class of schools immediately after the 3rd class course is over This whole time teachers of industries and agriculture for one year will more than balance the teaching of those subjects for two years in the Lower Secondary Schools

19 Agriculture has been suggested to be a compulsory subject in every school. A practical working scheme for this art is of primary importance The following is the scheme I propose for a village school consisting of about 30 boys

The teaching of Agriculture should should be both theoretical and practical Theoretical portion should be taught by the teacher in the class room and its practical application demonstrated in the field There are three kinds of soils from which all our agricultural produce is obtained viz dry, wet and garden For practical demonstration therefore every School ought to possess a small extent of all the three kinds of lands say an acre of dry, 10 guntas of wet and 10 guntas of garden Very often where there is a well for irrigation in or near the dry land allotted a part of that land maybe converted into garden land, otherwise the garden cultivation has to be transferred to a part of the wet land The lands have to be

Selected after due consideration of conveniences for irrigation the quality of the land and its proximity to the school &c of convenient Government waste is available it is well and good if not the required land has to be acquired or rented from some one possessing it The Dep.t Commissioner Chitaldrug District was kind enough to inform me that this question of land for Schools was —— moved in the Dasara Assembly and that land was promised

20 After acquiring the land the question of its treatment and protection crop up The so called School committee now appointed are only nominally existing The members have to be stirred up or changed so as to make this committee a really responsible body They have to select

an interested man to cultivate and protect the crops on the School farm with his own labour and implements &c. unless the School supplies him with different implements seeds and manures in the latter case he shall use those in place of his own. The cultivator's duty must be to carry on all operations as the School authority prescribes and fence and guard the crops. The School master must keep a yearly register of all those operations carried out with dates. The register will be in two parts, one for experimental and the other for sample plots and will among other things contain details of area under each crop manure used cultural operation- irrigation

Selected [illegible] related to quantity sown, the convenience [illegible] of sowing the condition of the land [illegible] — at different periods the school [illegible] meteorological conditions [illegible]-ment [illegible] invaded in the interval and the and good [illegible] [illegible] all with data to be acc[illegible] [illegible]. When the crop is one poss[illegible] invaded the cultivator [illegible] children given away 1/2 or 3/4 of it according to info[illegible] the help rendered by the School land for its remuneration for his labours and the D[illegible] the remaining 1/2 or 1/4 kept for School was pro[illegible]. The cultivator shall allow the 20 [illegible] [illegible] free to partake of the question local operations in [illegible] he is crop [illegible] engaged and put them in the way commut[illegible] so as to enable them to acquire nomina[illegible] a practical knowledge of such [illegible] be [illegible] operations.

[illegible] 21. Suitage in a Scin[illegible]

boys there are 10 boys above 10 or 11 years of age, and the rest below 10 then every elderly boy with two younger ones make a working party and they will do all the work allotted to them jointly The elder boy will be the real worker while the other two will work with him as best as they can as his assistants

22 The School farm shall consist of 3 kinds of land, dry, wet and garden, and each class of land will again be divided into two categories viz (1) Experimental plots and (2) Sample plots for dry lands' cereals, pulses and industrial crops requiring no irrigation shall be raised, in the wet lands paddy of various kinds and in the

garden portion vegetable and
industrial crops throwing under
heredical irrigation shall be attempted
All the sample plots shall be worked
and managed by the cultivation of the
land while the experimental plots
shall be worked solely by the
hard-labour of the students The
experimental plots shall not be
more than 5 to 10 square yards
for each working unit of students
and they will be located on one
side so as to allow of an inner
fence which the students have
themselves to put up for saf
guarding the crops The sample
plots will be half a chain wide
and one to two chains long so
as to allow of easy ploughing
Both kinds of plots shall be

marked and numbered by planting small stones between every two. The situation of the plots may be seen from the following sketch

23 After the division of plots comes the question of crops. The following will be the probable crops to be raised in the several plots of each category of land say one kind in each plot

Dry land

I cereals

(1) Ragi of various kinds
(2) cholum do
(3) Millets do
(4) wheat do

II Pulses used as food

(1) Cow gram do
(2) Dhall do
(3) Horse gram do
(4) Bengal gram do
(5) Black gram do
(6) Green gram do
(7) Thuvaram do
(8) other pulses

Wet land

I Hundreds of kinds of paddy each differing from the other in form, size and color of grain, nourishing value, the kind of soil and cultivation required the season of cultivation and above all the period which it takes to mature

x c

Garden land

I Vegetable used cooking

II Industrial crop

(1) Oil-yielding crops
(2) Sugar cane of various kinds
(3) Starch yielding crops of various kinds
(4) Fibre-yielding crops of various kinds
(5) crops yielding condiments
(6) Scent yielding

x c

III Industrial crops

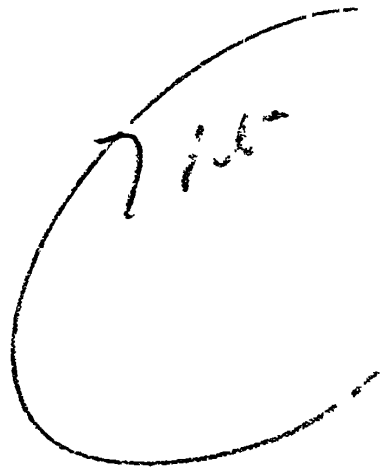
(1) cotton of various kinds

(2) Oil seeds do

(3) Fibres do

(4) Dye-yielding plants

(5) Fodder crops &c



plants and flowers

(7) Those yielding medicinal drugs

(8) Mulberry of various kinds

(9) Edible fruits

(10) Betel-leaf &c

The kinds of plants and varieties under each head are too numerous to find place in a discussion like this and their enumeration is un-necessary at present or is not possible or desirable to cultivate every kind of crop simultaneously one or two kinds from every class has to be selected for cultivation in each year and one plot put under it.

24. Having so far described the preliminaries, it now remains to describe the method of cultivation wherein lies the importance of the object to be fulfilled. The process of cultivation naturally divides itself into two viz (1) processes the experimental stage of which

for next year

the superiority or inferiority has yet to be determined by enumeration and (2) the methods approved to be good by scientific experts but not adopted in ordinary cultivation by our ryots through ignorance carelessness or want of means, and which it is now necessary to impress the cultivation with. The former kind of cultivation we introduce into the experimental plots. In this cultivation the outturn is of no consequence but only the value of the experiment or the experience gained is wanted. The latter kind of cultivation will be confined to the sample plots. Here the outturn and results obtained have to be really satisfactory and instructive to the boys and

the neighbouring cultivators Thus when the suggestions sketched out are really followed the School farm will not only serve as a place of practical instruction for School boys and agriculturists in general but it will serve as an experimental station also at a moderate cost

25 See the next page will be found Some of the items of cultivation for testing in the experimental and sample plots and as we progress further the list will be capable of an unlimited expansion

To be tried in the Sample Plots

I Sand, clay and organic matter are the chief mechanical constituents of all soils and they are to exist in a fixed proportion to make the soil rich. Therefore the mechanical composition of soils is a great factor in influencing the outturn of crop. Different crops delight in different proportions of these.

To be tried in experimental Plots

I The truth of the assertion described in No 1 Sample Plot will be more clearly demonstrated by sowing the same crop in the experimental plot in which the constituent ingredients are disproportionate

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To be tried in Sample plots

It is very difficult to find these existing in the required proportion in all soils Therefore a mechanical analysis of the soil should be made and the different constituents replaced before sowing any crop Potatoe Beetroot Groundnut and all other crops of which the part used develop underground delight in loose

To be tried in the sample plots

Soils in which sand predominates
An equal proportion of sand and clay
and about 5 per cent of organic
matter is required for cereal crops
and so on When the crop to be raised
is known a proper proportion should
be secured before proceeding with
the cultivation Though the ryots know

value of cultivation mentioned
Sample Plot No 4

To be tried in experimental plots

Something of this by experience it is rarely found applied in practice. The proper proportion helps to increase the outturn

(II) The deeper the soil is moved the better does the crop resist drought. Deep ploughing all at once is bad. Therefore ploughing to the usual depth and then stirring the sub soil in the

Alternate ploughing

(III) A shallow ploughed plot may be simultaneously sown with the same crop as in No. 2 sample plot and the results demonstrated

II An experimental plot should be ploughed in early mansoon and sown simultaneously with the same crop mentioned in the

furrows to a depth of 4' as prescribed This is no where done by the ryots This has to be introduced into a plot and the advantages demonstrated

(III) Cur. ploughed fields give higher returns and the crops on them resist drought much better than those ploughed in early mans

just before sowing and yet no car-ploughing is ever attempted in the manure destricts, one plot must be car-ploughed and sown and the results shewn to students

IV) Bone-meal mixed with ordinary compost and applied to cereal crops has the property of raising the outturn year after year until it nearly

Short manure

Sample plot No 3 and the results compared with it

(IV) ~~An~~ experimental plot cultivated with a proportionate quantity of ordinary compost manure without bone meal will illustrate the value of cultivation mentioned in sample plot no 4

doubles itself and yet it is no where thought of by the ryots Thousands of tons of valuable bones are yearly lost to the ryots and they go to enrich the coffee Planters This meal must be applied to a plot and the value yet demonstrated

(V) When leguminous crops, such as horse-gram and sun hemp

V One experimental plot may be applied a proportionate quantity of purely leaves of other kinds and the result contrasted with that of Sample plot No 5

are grown and ploughed in as manure the soil yields better results than when mere leaves of mixed kinds are used as manure one paddy plot may be put under it and the value demonstrated

(VI) Saltpetre mixed with compost manure and applied to Potatoe crop will enhance the outturn

VI An experimental plot may be put under potatoe using compost manure (without the nitrate) and

and no ryot throws this and more trees this A garden plot maybe put under it and the value of the manure demonstrated.

(VIII) Flesh and blood largely enchance the outturn of crops and fruit plants Although it is so valuable thousands

the results contrasted with that of Sample plot No 6

(VII) Some fruit trees maybe tried with other manure to constrast the results with those in Sample plot No 7

cattle are thrown away in the open around villages making the places insanitary and none turns the carcass to any advantage A few fruit trees and crops may be applied the manure to shew the result

26 Instances of this kind need not be multiplied here I would like to add that various other methods known to be best by scientific agriculturists and which are not practised by our cultivators may be introduced into the sample plots for demonstration purposes of educational value

27 Ascertaining at first what crops are fit for what soils timely ploughing and sowing, proper manuring, selection of good seed and timely carrying on of all subsequent operations will large contribute to successful agriculture Therefore in the cultivation of sample plots all these must receive prompt attention

28 Besides the cultivation of experimental plots as described above

instituted to compare with the results achieved in the sample plots other methods of purely experimental character maybe introduced into them to gain experience in regard to doubtful agricultural matters viz

(1) Testing the manurial value of various kinds of wild plants by using them both as green manure and in the compost form

(2) Trying to grow paddy under the American System of cultivation with periodical waterings instead of flooding constantly

(3) Transplanting and Sowing broad cast

(4) Testing the value of different oil cakes and mineral manures to different crops and so on

Each elderly student should maintain

a journal of all operations carried out in the farm with dat details cost &c

29 All stores tools and plant as well as seeds and special manure must be supplied at Government cost for which 1/4 the value of the outturn from the lands maybe secured to Government The School committee must be responsible for rendering all reasonable help in ordinary matter The approximate expenditure on School farms will be as follows

I Annual or recurring expenditure

(1) Assessment of 1 acre of dry land at Rs 1-8-0 per acre	1-8-0
(2) do do 1/4 acre wet at 6-0-0	1 8-0
(3) do 1/4 acre garden land at 4-0-0	1-0-0
(4) Tools and implements, seeds manures Rs 10 to 20 average	15-0-0
	19 0 -0

II Capital expenditure

(1) A small circular 4½ ft. diameter well, revetted with pot rings in places where no permanent wells or irrigation sources exist and where sufficient water could be tapped within 25 to 35 ft. approximate cost — Rs a p 35-0-0

(2) A small kapile bucket with rope and arrangements for lifting water — 10-0-0

(3) A zinc-sheet shed 10 feet square with mud walls for keeping stores and seeds — 25-0-0. ×

70-0-0

III Income

Deducting about 10 square yards for each of the few groups of students for experimental plots in every

kind of land, there will be left 36 guntas of dry, 8 guntas of wet and about 8 guntas of garden after leaving a margin for fence The income will be approximately 3/4 pallu of paddy (taking 1/4 share of the produce)

3 0	
10 - 0 - 0	~~one-Half pallu~~ 180 seers of Rage (i e 1/4 of the produce at Rs 1 per pallu
6 0 - 0	one-fourth value of garden crop
19 0 - 0	

The income maybe more in good years and smaller in bad years

General

30 For the successful teaching of agriculture it is quite necessary that we should have intelligent men as teachers in the schools. If the schools have no qualified, and interested men the whole scheme

dwindles into nothing It is therefore necessary that each school master must be trained in the agricultural science and the inspecting staff, assistant and deputy inspectors should also have good knowledge of agriculture For these educated men it will not take more than a few months to pick up the subject while inspecting the schools they have to take time and examine the students on agriculture and industries also

31 A short course of agricultural training given to village schools masters who are ignorant of scientific education may not enable them to think out and plan the nature of experiments to be instituted and sample cultivation

to be followed A man of scientific training and experience should therefore be prepared for approval in each year the plan of work sketched out for the cultivation of experimental and sample plots in the next year The plan should be ready for adoption before the South-west monsoon commences The rough plan may be prepared by the School master in consultation with the school committee and submitted for approval in the harvest season of the previous year

32 The question of introducing the teaching of agriculture and industries into all schools simultaneously is a very difficult one to solve It is a question of finance staff

and the willingness of people to take
to learning the industries it may
at the start be confined as an
experiment to larger Schools where
average daily attendance is not less
than 30 and among them to places
where people show special desire
to learn and develop industries
to students and teachers get trained
in the first taught institutions
It will be easier to extend the
Scheme gradually to other Schools
replacing retiring teachers by
trained men Now the meanwhile there
will be time to study the working
the scheme in the first intro-
duced, institutions and develop it
as to suit further requirem
in seasons when agricultural
operations are at a stand still
Each student may be taken to the

nearest gardens and fields or to cane mellers places and thresh-ing floors and made to partake of operations going on there

33 In the elementary Schools it may be possible to teach only the light and middle class industries The School boys being children of people of various grades of the Society, a light profession such as rope making or weather work may suit the requirements of some While others may dislike them and prefer the middle class ones Both these are to be taught the light one in the 3rd class and the higher ones in the 4th and 5th classes or as a special course as already suggested

34 A practical scheme for teache

13

every industry enumerated under question A is not possible to draw up, unless one has a practical knowledge of every one of these. Though it may not be very difficult to prepare a scheme with some experience and study A practical scheme for any of them can be drawn up having the same division of students as mentioned under agriculture and with tools materials and work shed supplied at Government cost. Two-thirds part of the sale proceeds of materials manufactured may be kept for Government to compensate for the expenditure incurred and the remaining 1/3 given to students. A small portion of the Government share may be paid to the teacher of the industry as a reward in order to create

an incentive that his income will be proportionate to the value of articles he turns out Best Samples of various patterns of industrial products maybe purchased and kept in the School to serve as models and the articles turned out are equal to them in quality combined with quickness the educa maybe Sued may have been Succe -ful in that branch By looking at the articles manufactured it may often be possible to judge of the progress made

35 Most of the light industries can be mastered by the teachers in course of one or two years and then the temporary establish -ment employed for this purpo maybe gradually dispensed in

the teacher taking the place

36 The light industries may be changed yearly and the higher ones every two years in case of necessity after studying the desire of the people to learn fresh ones. This will enable the student of each grade of society to choose to some extent the profession which he can really follow or the one to which he is naturally inclined

37 Under the present curriculum (H) from 25 to 27 hours are devoted to teaching of literary subjects in a week Taking the number of working days in a week as 5 1/2 the period of instruction comes to about 5 hours a day They seem to assemble at 7 or 7-30 A m and disperse after 3 hours of work In the afternoon they work from

about 3 to 5 thus making in all about 5 hours

38 With the introduction of practical agriculture and industrial subjects the total number of working hours in a week will be found insufficient as about 13 1/2 hours will be required for practical classes alone To meet this requirement the daily working period has to increased from 5 to 5 1/2 hours and Saturday morning hours fixed at 4 1/4 hours This will give us 31 1/2 working hours a week of which 13 1/4 maybe given for practical agriculture and industries and the remaining 18 1/4 to literary subjects of the latter is not sufficient to meet of daily working hours

Should be increased to 6 or some of the subjects now taught or portions thereof will have to be dispensed with. Increasing the working hours to 6 does not appear feasible. The number of hours devoted to different subjects may be curtailed and the subjects altered as shown in the following table

Subjects	Class III		Class IV		Class V		Remark
	As it is	As it should be	As it is	As it should be	As it is	As it should be	
Language	7 hrs	5 hrs	6 hrs	4 1/4 hrs	6 hrs	4 1/4 hrs	
Copy writing	1 hr		1 hr		1 hr		Home work
Dictation	1 hr	1 hr	1 hr	1 hr	1 hr	1 hr	
Grammar	4 hrs	2 hrs	3 hrs	2 hrs	3 hrs	2 hrs	
Arithmetic	5 hrs	3 hrs	5 hrs	3 1/2 hrs	5 hrs	3 1/2 hrs	
Geography	2 hrs	1 1/2 hrs	2 hrs	1 1/2 hrs	2 hrs	1 1/2 hrs	Portions may be curtailed if necessary
History	3 hrs	1 3/4 hrs	3 hrs	2 hrs	3 hrs	2 hrs	
Agriculture	2 hrs	2 hrs	2 hrs	2 hrs	2 hrs	2 hrs	
Geometry or Hygiene	2 hrs	2 hrs	2 hrs	2 hrs	2 hrs	2 hrs	To be dispensed with and replaced by industrial subs
	27 hrs	18 1/4 hrs	25 hrs	18 1/4 hrs	25 hrs	18 1/4 hrs	

39 Thus it will be seen from the statement what subjects can be dispensed with and what can be curtailed and the number of hours that could be secured for practical agriculture and industries About 6 hours in a week have to be set apart for practical industries at 1 hour a day and 7 1/4 hours for practical agriculture at 1 1/4 hour a day on all other days except Saturdays on which only one hour will be devoted when no agricultural operations are in progress in the School from the students may be taken to adjacent gardens, sugar-cane milling & arecanut-boiling places and threshing floors &c for instruction and practising those operations going on there The curtail.

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as above of the hours to literary subjects may bring in another difficulty of one teacher being compelled to teach several classes within a short time This has to be overcome by appointing pupil teachers to teach the lowest classes when the teacher takes the highest classes The pupil teacher maybe paid a rupee for his work Apart from the school students outsiders desirous of attending the practical instruction classes maybe allowed to join provided they work with their own materials or they wish to work with materials supplied by the ~~Government~~ school. they have to give away the manufactured articles to Government

40 When locally produced articles II (c) are required they are to be purchases

in the place itself In case of produce growing wild it has to be collected by hired labour or better on small contracts Those articles which can be grown in the farm maybe obtained by paying the value of the cultivators share In any case the cheapest possible method has to be adopted In case of wild produce, the boys may be made to collect if it could be done without much trouble

41 The case of text books is a very difficult one at present There are a few books written in Canada on agriculture but they mostly treat of general scientific principles without any practical instruction

for the cultivation of various crop
now raised in the province Eve
what is given is very general an
not of much value There are no
books or records which give the
minute inner details in regard
to the cultivation of any one kind
of crop - a knowledge of which
alone can make a man an expert
with regard to industrial subjects
there appear to be very few or
no books published in Karachi
for the use of those following industrial
pursuits The knowledge which these
men possess of the different arts
have been in most cases a gift
by the father to the son and
such knowledge though often
valuable is found free of the
adventure of western improvements
based on science

42 At present there are a few here and there who possess very valuable information in certain matters Their knowledge rightly understood and committed to writing will be very valuable to the generality of people and even to science but such men are unknown and unheard of for want of education and advertising tendencies which is naturally wanting among our people except in cases prompted by the polish of western education Very often knowledge is a thorough secret and is not revealed to others It dies with the man in many cases This has been the bane of all progress

43 I would therefore suggest

that a thorough agricultural and industrial survey of the state being made by interested experts who have a research turn of mind The survey party should travel all over several times investigate and record all about crops and industries and after threshing out each subject organize supplement the knowledge with all that is useful in the western books on the respective subjects and publish the information so collected in the form of bulletins to be sold cheap several bulletins relating to one subject bound together will give us the manuals required This a tedious work which will take 2 or 3 years to finish but bulletins maybe

to appear one after another after six months or so

As without this procedure, publishing mere translations or extracts from the western agri-cultural books without the practical descriptions relating to our crops which differ vastly from those of western countries, will not be so much practical value though they may be useful for imparting general theoretical instruction what we want ~~of~~ is to study all our crops from the stand point of western knowledge, correct mistakes and introduce improvements where necessary For this reason so far

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agriculture is concern, manuals must be got up after a sound knowledge of the practical cultivation now obtaining. Western books which treat of special crops such as potatoe cotton sugar cane &c and books on industries would be very useful in getting up bulletins. An industrial and agricultural survey is therefore necessary

45 The most convenient school hours would be from 7-30 to 10 A m and again from 3 to 5 II (g)

28-11-10

H S Sivarajasar
Asst Con. Forests

Note by S Rangacharlu as required by Resolution No 2 of the meeting of the Indus trial Instruction Committee held in Bangalore on the 15th

According to the departmental circular, the highest stage of elementary instruction to reach in the Vernacular V or in the Anglo Vernacular III class, the age of the boys being generally about 12, in the Zilla and District Head Quarters, and in the large villages near about these. In the Elementary Schools of remote village the ages may be taken to be generally about 15 or 16

2 The proper age of boys to begin to learn a trade, and handle tools, appears to be about 12 and, at all events not below. So far as the industrial instruction concerned, the remote villages may be left out of account for the present. The boys of the other schools can, therefore, receive along with the ordinary school subjects practical instruction in some trade, only for 2 or 3 years at most, before they pass

from the Elementary Schools they will not
do not have made some progress in tech-
-nical instruction in these Elementary —
Schools, but a further course of practical
training for 4 or 5 years appears to be
necessary, before they can acquire suffi-
cient skill and dexterity to enable them
to earn a livelihood by the particular
trades which they have been taught in
the Elementary Schools

3 We must therefore have some special
technical institutions for different trade
with proper equipments and staff of
specialists to which the boys can resort
to finish their further industrial course
Such institutions are necessary also to train
up the trade teachers for the ordinary
Elementary School as well as for lower
special technical schools, which might
be opened in course of time

Resolution 2
Questions (d) + (e)

4 In the Elementary Schools there are

are no masters who are skilled in any particular trade, who can teach the trade to the boys. Such masters have to be sought among the artisan classes or, the services of men trained in the technical Schools elsewhere have to be secured. The latter class of teachers would, of course, be better in every respect. If teachers are selected from amongst the existing staff, and are trained to teach industries, they should be given a special allowance in the same way as the Sloyd masters are given at present.

Question (I) 5 Trade manuals for the guidance of teachers and the necessary text books have also to be written by experts, or, translated by scholars into Kannada from foreign languages. The materials to the worker-when should be supplied at the cost of Government.

The existing accommodation of the

Elementary Schools are in most cases insufficient, even for their present purposes. So it would not be bearable for the trade classes to go on, unless additional accommodation of some sort were put up or, attached to the buildings of these schools. Then extra accommodation is necessary also, to keep safe the raw materials and things to be made of them.

6 When a large number of extensive work shops and factories for different industries springing up, and remunerative work, high or low, is available everywhere boys may, of themselves flock to the trade classes of any institution, and stick on under any conditions. This is however a dream to be realized in the far future. At present the trades are not very attractive to our boys.

7 The condition of our handicrafts men in the towns and villages, is not an enviable one. Most of them are extremely

poor, while others eke out their livelihood by having recourse to a precarious sort of agriculture. Such a flight of the expert tradesmen cannot be a tempting prospect to any candidates for proficiency in the trades

& the boys of the agriculturistan urban families may not care to have technical instruction in the Elementary Schools at the cost of the literary unless the former instruction is deemedly superior to what is available to them in their own homes, and the other boys may avoid the same through the old prejudice against manual labour, or, otherwise Some special inducements may therefore, have to be held for regular attendance and hearty work in the trade classes, at any rate for some years to come Fear of downward

from School might be an inducement, in
the case of any well appreciated Elementary School But small merit scholarships of from a few annas to a rupee or two, or, the distribution of the proceeds of the sale of manufactured goods a part of them would be a better an additional inducement

9 Trade instruction in the Elementary Schools need not be confined to the of the artisan classes These boys are too few and not more than 2,000 in a School Even these few belong often to different crafts so that each ~~boy~~ would require the employment of a separate teacher for himself With all the accumulated heredity some of them may be born stupid and be workmen By exclusive attention to them the results of the undertaking

might not be adequate to the efforts made and the expenditure incurred, while the most talented among the other boys would go without an opportunity to develop their faculties

Question (b) 10 If more trades than one are taught in a school each Elementary School would require more than one expert teacher of industries, since none can be expected to be an expert hand in several trades. I am for a single trade being made the speciality of each Village School

Question (c) 11 The trade to be taught in an Elementary School must have regard to the facilities that may be found for it in the locality of the school, both for the boys opting trade classes, and for the sale of the products. All the boys fit for a trade class may be compelled to learn the trade relating and other remain in the school although the special hereditary instincts and powers of the few artisan boys will have, in this case, to be kept in abeyance for a short time, this being unavoidable even in the present purely literary course of these Schools

the option of selecting a trade, according to their bent and aptitude may be given to the artisan, as well as to the other boys, when they leave the Elementary schools, and are found fit to enter the special technical schools, referred to in para (3)

12 It would be best no doubt if it could be given, in the Elementary schools, a general training in manual work including the Elementary processes and operations of different kinds of industrial arts and occupations and then let the boys choose trades suited to their tastes and aptitudes, when they go to join the special technical Schools. The scheme of manual training as recommended by the late Inspector General of Education in Mysore in his Special Report on Manual Training in Mysore, does not appear to have been introduced, or, rather systematically anywhere except in the Elementary School attached to the Mysore Normal School

The early training attainable by pupils
whose appears to be very necessary and
desirable, as a preparation, for
training in the trade classes of all kind of
institutions. The more efficient training
of these system, in as many schools as
possible, if not in all districts our best
consideration, when we are think of
industrial education of our boys. It goes
without saying that the early years are
the best for the manual as well as the
literary training

resolution (2) 13 I do not find myself competent to
questions (e) give a list of the different trades that
+ (g) can be taught in different school, as
this, requires a thorough acquaintance
with the actual trade conditions and
other circumstances, connected with a
particular school locality

A good industrial expert officer
on this-front, former after studying
the results of the Industrial Survey
of the State, contemplated by the Government

would be of great value

14 Matting, Basketry, Carpentry, Tailoring, Smithcraft, Leaving and the like may be tried in places which afford special advantages for these trades, and school gardening and Agriculture, in so many schools as possible, in parts of Gorubidnur and other Talukas where cheap wells with a good perennial supply of water can be sunk

15 Bamboo work may be tried in the Village Elementary School at Kyathasandra, near Tumkur, from the III class upwards. The Sheroff master is an intelligent and earnest a man as can be expected in a Village School. There are about 20 families of basket-and-mat makers in the village, the services of any one of whom may be hired for about Rs a month. A thatched shed of areca nut and bamboos, consisting of a room and a hall may be constructed at a cost of about Rs 100, or the furniture

mud house, standing on the school premises, may be purchased for the same amount, or, less, in addition to the amount of compensation which has been long fixed for the acquisition of the site. The instruments required for the trade of a pupil are only two. a heavy knife with a broad half blade and a small lance, about 9 inches long including the handle. 20 sets of the knives and the lances, for a class may be got for about as many Rupees and a hundred bamboos for Rs 6. A monthly grant of about Rs 10 for small Scholarships completes the list of requirements.

16 "In Japan says baron Y Kikuchi in his lectures" There is almost no limit to the variety of things that we can make with bamboos" But for us to bring in a foreign expert for each little trade to be taught in an Elementary school, or, for the boys to learn all

all the imaginable fine things that can be made with the bamboos is out of question, at present. The ordinary rough things, such as the 'Medaro' are capable of making are all that can be taught in the school.

17 Even these rough things, with the usual cheap rates of sale, do not find a ready market. The 20 families of 'Medaro' at Kyathanaunsa are together capable of producing things worth Rs 140, or, more a week, to meet a less demand. But in the weekly fairs of Kyathanaunsa and Tunkin, the total sales by all the families, do not appear to go, on an average, beyond Rs 10 a week. This keeps the brothers idle for a great part of the day and the week and, of course, they are poor. During the harvest season and "Epon" festival, when there is some little demand, each family carries a few bamboos and there

instruments, to different villages within the radius of 15 miles from Kyathandra to sell their trade, and exchange their articles for his pecuniary in kind, thus earning slightly better rates than in the weekly fairs and bazaars

18 But for the difficulty of procuring demand for all the articles that can be produced, the trade classes, recommended for the Kyathandra industrial school might be made self-supporting, since the profits of the trades are always 30 or 40 hundred percent of their capital when their goods find a sale. And to neither the whole, nor, even a good part of the cost of maintaining the classes is likely to be realized. This difficulty of finding purchasers appears to be common to almost all the trades, such as pottery, sericulture, etc

19 The inability of our handicrafts

to compete successfully in the open market and the absence of demand for their goods seem to have induced many of them to gradually give up dependence on their hereditary trades, and to seek their livelihood by other means. The attempts at increasing the number of French men, or at improving their condition appear to require, for their success, measures calculated to create a greater demand for their goods, while the quality of their work is improved by proper instruction and training in appropriate institutions. Until a change, in this direction, somehow, takes place, to some extent, the trade classes of the Elementary schools and the industrial education, in general, may not be popular, or, much sought after.

Question (f) & (h) 20 A rough sketch of the time tables for the Kannada III IV & V classes as well as for the I II & III Anglo Kanna

classes is appended

The no of working hours are 30 in the week, all round including of 25 for the Kannada and 27 or 28 for the Anglo Kannada classes, as in the model time tables of the Department. The slight increase of hours might not be taxing, manual work being a sort of relaxation from the mental and literary, and the proposed time tables for the Kannada classes providing 9 hours, and those for the Anglo Kannada classes 7½ hours of manual work

Question (f) & (h)

21 I think that the literary course of the III, II and V classes of the Kannada Schools, or, of the I, II and III classes of the Anglo-Kannada Schools will not be much affected by the introduction of Trade instruction, but in the case of the IV and V classes of the Anglo Kannada-Schools, the literary course of the two classes would

require being extended by one year, so that a boy of the IV class (2nd Form) will have 3 years instead of 2, as at present, to pass the Lower-Secondary in English

section (f) 22 For the Elementary schools in which only literary instruction is given, the morning and afternoon hours as at present, after the commencement of the agricultural boys of the II class and upwards, are given leave for a month, or, 20 days, in the seasons of cultivation and harvest, and the artisan boys, if any, are given the option of attendance only in the mornings.

23 In an Elementary school in which a trade class may be opened the Head Master and such of his assistants, as will have no occupation when the trade class or classes is work, may be directed to keep order in these classes, and otherwise help the trade master, especially, when the little

happens to be a homesteaded farmer knowing nothing about the school or class management. The masters may also themselves try to learn the trade thus setting an example to their pupils. The shop-master, or the most intelligent of his assistants should keep the accounts of the trade classes.

24 Where possible, members, with some experience and enlightened ideas may be added on to the present school committees and the committees asked to make special periodical reports, regarding the application and requirements of the trade classes, and suggestions, if any for their betterment. The same may be demanded of the departmental inspecting officers both they visit the schools, the local, revenue officers and village officials being told to do all they can to make the classes a success.

Mysore
6/12/1910

I C Class

Days	11 to 11-50	11-50 to 12-10	2-30	2 30 – 3 20	3 20 – 3 45	3 45 to 5
Monday	Reunion lesson	English Reader		Kannada Reader	Writing English	Manual work
Tuesday	English dictation	Arithmetic	Kannada Reader	Kannada dictation	do	do
Wednesday	English Reader	do	do	Kannada Grammar	do	do
Thursday	do	dictation English	do	Geography	do	do
Friday	do	Arithmetic	do	Kannada Composition	do	do
Saturday	do	do	English dictation	Geography	Kannada dictation	dictations

Jessie Tilley Cl ✓

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No single work please with leaders as well as possible – Jr

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A V II class

Days	11 to 11-50	11 50 - 12 40	12 40 / 30	1 30 - 2 30	2 30 - 3 20	3 20 - 3 45	3 45 - 5
Monday	English Reader	Arithmetic	Kannada Reader		Kannada Grammar	Writing English	Manual Work
Tuesday	do	do	do		English Dictation	do	do
Wednesday	do	do	English Grammar		History	do	do
Thursday	do	do	Geography		English Dictation	do	do
Friday	do	English Grammar	History		Kannada Grammar	do	do
Saturday	Arithmetic	Kannada Reader	English Dictation		Geography	English Grammar	Kannada Dictation

A V III class

Days	11 to 11-50	11 50 – 12 40	12 40 1 30	1 30 – 2 30	2 30 – 3 20	3 20 – 3 45	3 45 – 5
Monday	English Reader	Arithmetic	Kannada Reader	S.	Kannada Grammar	Writing English	Manual Work
Tuesday	Translation into English	English Reader	English Grammar		History	do	do
Wednesday	English Reader	Arithmetic	Kannada Reader		English Dictation	do	do
Thursday	Translation into English	English Grammar	Kannada Grammar		Arithmetic	do	do
Friday	English Reader	Arithmetic	Kannada Reader		Geography	do	do
Saturday	Translation into English	English Reader	Arithmetic		History	English Dictation ~~Geography~~	Geography

Kannada III, IV & V classes

Days	7 - 8	8 - 9	9 - 10	3 - 3 30	3 30 — 5
Monday	Kannada Reader	Arithmetic	History	Grammar	Manual work
Tuesday	do	do	Manuscript	Composition	do
Wednesday	do	do	History	Dictation	do
Thursday	do	Agriculture Memorization Sanskrit	Geography & map drawing	Grammar	do
Friday	do	Hygiene	History	Composition	do
Saturday	do	Agriculture, Memorization Sanskrit	Geography & map drawing	Dictation	do
9	10	10			9

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Bangalore
16 December 1910

To

M Shama Rau Esq M A
President of the Committee for
Elaborating a Scheme of Practical
Instruction in Elementary Schools
Bangalore

Sir,

In pursuance of a resolution passed at the first meeting of the Committee I have the honour to forward the enclosed note containing my views on the Subject

Owing to pressure of other work there has been some delay which I regret was unavoidable

I beg to remain,
Sir
Your most obedient Servant

C Krishna Rau

Note by C Krishna Rau, on Resolution 7 of the first meeting of the Industrial Institution Committee, held in Bangalore on the 24th Oct 1910

Practical Instruction in Elementary Schools

An attempt was made three years ago to place the training of young pupils in our Elementary Schools on a satisfactory basis. The services of Miss Latter, a Kindergarten Special were engaged and a training class was opened in Bangalore with about forty teachers. All went well for a time and excellent work was being done, but unfortunately Miss Latters sad and sudden death left her work incomplete. The work was however, continued by others and the trained teacher ultimately returned to their schools to practise the methods they had learnt. It is to be regretted, however, that in the arrangement made no account was taken of the subordinate inspecting officers whose duty it is to test the work done and to guide the teachers. This defect calls for an early remedy. Unless sustained efforts are made

not only to introduce up-to-date methods of teaching the young into Schools in which they are little known but also to prevent their degeneration in Schools into which they have been already introduced little good can be hoped for from the efforts that have already been made

The most beneficial results are claimed for Kindergarten methods of instruction in the infant stage and for manual training in the later stages of a child's early education In the hands of a skilful teacher modelling drawing paper folding, paper cutting, and cardboard work with gardening and nature study afford unlimited scope for the development of a childs mental faculties The following are some of the opinions which support this view

"The troublesome search for arguments is now over, the scientific basis of manual instruction is now accepted We have a formula to hand which makes it plain to the meanest capacity how by the

introduction of manual training into Schools we do not hamper, but positively promote intellectual development"

(The Teaching of Handicraft in Elementary Schools – by J G Legge B A Director of Education, Liverpool)

(2) "And yet when we are called upon to recognise the importance of manual training in education, in England at any rate there is wide spread scepticism and hesitation The claim made on behalf of manual training for young boys is that it is a profoundly natural, wholesome and successful method of improving the brain power, in other words, the mental processes It is to the discredit of educators in this country that that claim should still be disputed" (By Rev the Hon Lyttelton, M A D D, Head Master of Eton)

Manual training is not industrial Education but an element of it So far as it goes it is industrial training" (Superintendent of Manual Training, Massachusetts)

Language, mathematics, science, history and art must ever stand first in the elementary schools But these may be handled in such a manner that by means of them the sevenfold ability which constitutes industrial intelligence will be developed from grade to grade"
(From an address delivered before the New York State Teachers' Association, Columbia University, Dec 29, 1909)

The seven fold ability referred to in the above paragraph is described as follows

1 Ability to grasp a situation, to see what is to be done
2 Ability to interpret directions, spoken, written, and drawn
3 Ability to foresee what will be required, and to plan accordingly
4 Ability to co-operate intelligently with others
5 Ability to do thoroughly well whatever is undertaken

6 Ability to estimate values justly

7 Ability to secure from work the highest satisfaction of success

This address concludes with the following words "The Elementary Schools, as a Factor in Industrial Education, may be raised to a higher power without changing their essential character. To change that character is to make them minister to commercialism instead of to general intelligence, to make them train skilful fingers content to supplement a machine, instead of sensitive minds content only with the highest ideals of the race, — that would be to make them promoters of industrial degeneracy rather than promoters of industrial health"

It will thus be seen that the first step towards preparing the pupils in our Elementary Schools to take an intelligent interest in industrial activities is to insist on proper attention being paid to the practical side of the

Education given in our elementary
Schools If every Subordinate inspecting
officer be given an opportunity of
acquainting himself thoroughly with
the nature of the work that is
expected to be done in the Elementary
School if he is not already acquainted
with it, he will be able to train
intelligent young teachers in his own
range by holding special training
classes at convenient centres By
this arrangement it will be possible
to supply a large number of Schools
with trained teachers in a
comparatively short time When
inspecting officers and teachers
have mastered the principles by
which they are to be guided in
carrying on their work in connection
with the Elementary Schools under
their control an attempt may be
made to introduce into Rural Schools
and into those urban Schools that

are situated in localities in which some particular industry is carried on, occupations which will prepare pupils to take an active share in the work carried on in the locality. Such instruction, however, will be confined to pupils above the age of eleven years in classes above the Vernacular III Standard.

Occupations involving the use of sharp edged tools or imposing undue muscular strain being considered unsuitable to pupils below the age of eleven years. Thus in boys' schools straw-plaiting, basketry, bookbinding, weaving, rope making, rattan work, wood carving, lacquer work, the making of toys, and agriculture and gardening may be taught. In girls' schools, needle work including embroidery, the making of socks and woollen caps, ornamental bead work, and making pickle and jams may be taught. A tabular

Statement of practical activities suggested for pupils below the age of eleven is given in Mr. Bhabha's Special Report on Manual Training in Schools of General Education

(b) As regards the question whether only one industry should be taught in a School or a variety of them, I would suggest that as many of them may be taught as can be taught efficiently But as a rule it would be desirable to concentrate all attention on the one industry for the teaching of which the greatest facilities exist.

(c) Until efficient arrangements can be made for teaching large class, the teaching should be optional

(d) The Services of the best local workman should be engaged for a limited period, the teacher receiving training along with the pupils When the teacher has mastered the work, the Services of the workman should be dispensed with

(e) The remuneration to be paid to the workman would depend on the work to be done, the time to be devoted to it, and the skill of the teacher It may vary from Rs 5 to Rs 10 a month When the work is transferred from the artisan to the regular teacher the latter should receive an allowance varying with the amount of work done and the number of pupils, the minimum allowance for each industry taught being Rs 2 and the maximum Rs 10 The amount may be fixed at Re 1 for every ten pupils or fraction of ten pupils under instruction

(f) Time may be provided for work by extending the course for the Lower Secondary Examination in rural Schools by one year, the work now done in classes IV and V being done in three years A special curriculum may be prepared for rural Schools making suitable provision in it for

the inclusion of rural subjects

(g) In the earlier stages it is desirable to give complete freedom to enthusiastic teachers to make their own arrangement with the help of local magnates and inspecting officers, for giving practical courses in any of the suggested or other suitable local industries After some experience is gained of the working of these classes, an attempt may be made to draw up such definite schemes as are suggested by local conditions and requirement

(h) Except in the case of instruction in industrial occupations all practical work is expected to be combined with the ordinary class-lessons In classes in which instruction is given in industrial work $\frac{1}{4}$ of the time devoted to literary subjects may be devoted to industrial work

(i) There should be no difficulty in procuring locally such inexpensive material as is required for light handwork. In all other cases application should be made to the Inspector General of Education at whose disposal a small allotment for the purchase of materials for rural industries may be placed tentatively for a year. The Educational department usually supplies all books required for the use of the teachers.

(j) 8 to 11 in the morning and 2 to 4 30 in the evening appear to be the most suitable working hours for village schools. During sowing and harvest seasons two hours in the evening from 6 30 to 8 30 may be allowed to be substituted either for the morning or the afternoon hours, if the pupils are prepared to make their own arrangements for providing the necessary lights.

I cannot conclude this brief note better than by reproducing the

Summary of conclusions and recommendations contained in the Report on Manual Instruction in Public Elementary Schools recently published by the Board of Education

(1) "We consider that Handwork should be regarded as an essential feature in the curriculum of every elementary School, and that all possible means should be adopted to encourage it, although we see difficulties in the way of its being made compulsory at present

(2) We consider that there should be a continuous and progressive course of Handwork throughout the Schools from the Infants' Stage upwards, and that it should be regarded as a method rather than a separate subject of instruction

(3) Although we recognise that the majority of existing teachers have had no special training in

Handwork, we do not regard this as an argument for postponing the introduction of this form of work. We think, however, that it is eminently desirable that a knowledge of Handwork principles should be an element in the training of all future teachers, and that increased facilities should be available for giving such instruction to existing teachers.

(4) We consider that the ideal system is one in which all forms of Handwork should be taught in the Schools themselves by the ordinary teachers, and that in Schools of sufficient size a room should be set aside for this and kindred purposes. At the same time we fully appreciate the valuable work that is being done in the Handicraft centres, though we are of opinion that more might be done to bring them into touch with the ordinary work of the Schools.

It is thus clear that the real remedy for the defects in the existing

System of Elementary Education is to be found in improving the methods of teaching the ordinary School Subjects by making suitable arrangements for the training of teachers and by creating facilities for practical work and manual training. This is a matter which has already engaged the attention of the Education Department which, with the active support of Her Highness' Government, will be able to do in due time what still remains to be done

Bangalore
15th December

Ashwa Rao

As the discussion at the first meeting of the Committee revealed a considerable divergence of opinion as regards its objects and the scope of its work I have thought it necessary to say a few words on the point of view taken by me and treat the subject as a whole Further, I find that the answers to the queries sent round, to be consistent they have to be made with reference to some consistent scheme have therefore given an outline of the one I have in view have answered the different questions wherever they could be appropriately dealt with

This note is divided into two parts with sub head as indicated below

Part I

A Preliminary observations

(1) The point of view

(2) Past experience

(3) The causes of the failure of Elementary industrial Schools and remedies

(4) The chief function of an Industrial School

B A general Consideration of the Scheme

(1) What is an Elementary School?

(2) The drawbacks of the existing curricula and methods

(3) Where to commence an industrial instruction

(4) The course

(5) Hours of practical work

(6) On teachers

(7) Industries to be taught

(8) How they should be taught

(9) The number of Schools

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Part II

The scheme we have proposed

(1) Interconnection between Industrial and literary courses in Elementary Schools

(2) Time devoted to various subjects

(3) Industries to be taught and the Centres

(4) Teachers

(5) Equipment

(6) Cost

Part I

A Preliminary observations

(1) The point of view

What this committee has been asked to consi is the subject of providing such 'practical instruction in Elementary schools as would enable 'the pupils to turn to some practical walk of life to earn enough to live upon And this evidently means that the committee should aim at something more than mere Manual Training under the different heads Agriculture Carpentry and so forth Manual Training is undoubtedly the best ground for preparing a child for pecuniary industrial instruction. but the aim of the former is not, directly to earn a living while that of the latter is

It was contended by many of the members that what is required is only a Manual Training Scheme and that though the aim of Manual Training be technically not to earn a living yet it would certainly help one to produce articles of trade To them it has to be pointed out that an experiment of the kind has been made in India which has proved a failure Mr J G Cumming I C S says in his special report of 1908 on Technical and Industrial Institutions (Page 33) Let me first clear away some misconceptions One is that Manual Instruction is Industrial Education I am afraid that many both pupils and teachers entertain this belief Manual Education is now a days held in Europe to be a part of general education, one of the objects is to overcome the traditional prejudice amongst certain classes against manual labour Manual instruction is used in certain missionary schools in the hope <u>not always realized</u> that the boys who do not belong to artisan castes will earn a living afterwards in a handicraft

Again a ~~very~~ high Educational authority on Manual Training and Industrial Instruction whom I had occasion to consult in this connection says As far as I can see the (Mysore) Government order contemplates the teaching of Industries or trades in Elementary Schools

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of the school day for this purpose The former are generally known as separate 'Trade schools The latt which combine both literary and industrial instruct are variously styled Government do not appear contemplate that institutions of the former type should be considered here The committee's wor Then, is confined to the question of teaching a few of those common industries that easily lend th selves to educational methods and that can be taught along with literary subjects, in what mi be termed Elementary' Schools

Small as the question appears to be its difficulty is really great Writing of Elementary Industrial education Mr Nathan in his Quinquennial Revie of Educational Progress in India, 1904, observes This subject which has taxed the ingenuity of the Educationalists of all countries presents a specially difficult problem in India For the organized industrie the conditions are not dissimilar from those which prevail in Europe But for industries which are prosecuted on a small scale by the majority of the industrial population in India they are much more complex and difficult And the latest and the highest

authorities on the subject equally recognize its great difficulty

Nevertheless it would be said that the right way to solve the question is to set about it by starting some schools and working them, i e by doing rather than by discussing about unknown and imagined difficulties and contingencies But whatever the procedure adopted in solving it would not be considered desirable to ignore past experience, especially in view of the difficulty of the subject

2 Past experience

In British India where a large number of such elementary schools are of the type of separate Trade schools the last ten years, from 1901 onwards, has been a period of much enquiry in this direction The report of the Col Clibborns Committee, the two Government of India Resolutions of 1903-4 and even Mr Cummings Report (Bengal) of 1908, not to mention other books like the Máthan's Quinquennial Reviews, are all unanimous in holding that till now experiments in this field "have met with little success

Turning to Japan a country which at one stage of its industrial development passed through experiences, somewhat similar to ours and in which a

large number of both the types of ... combined and the separate' schools exists we find the following in Professor Sharps report "After the introduction of the new educational system the desire to promote the material development of Japan led to various efforts in the direction of Technical instruction Supplementary Technical Schools were organized Agriculture, Commerce and Manual work were made optional in the Primary Schools and permission was given to introduce special courses' in these subjects even into Middle Schools But too little advantage was still taken of these Technical alternatives A scheme of state subsidies was also introduced Special institutes were established to train teachers But until these (certain conditions to which I shall refer later on) were developed, technical instruction languished Again Until these came about the mere provision of technical schools and the like produced no effect (The underlining is mine)

Writing about the teaching of Agriculture in Elementary schools Mr. Bhabha in his Special Report says "It is commonly asserted somewhat hastily as an obvious truth, That the elements of Agriculture

should be taught in all village schools These advocates are little aware of the difficulties He quotes authorities to show that the experiment has resulted in failure in the United States of America in France, in Ireland and in Canada

There is an impression ~~among some~~ that the prima or grant-in aid schools in India have succeeded in finding a way out that Mission Industrial schools some of which are of the combined type, have been successful and that the State could easily follow in their footsteps Now the true test of the efficiency of the training given in an industrial school is "whether old pupils are actually earning their livelihood at the craft which has been taught to them And judged in this light, the success of these schools is almost nil, for very few of the pupils have yet begun to earn at their trades, independently of help from outside And the great majority of even these schools as the various British Indian Official reports show still share the common fate of industrial schools in this country But for Government grants, which are, in some cases lavished on them they would have had a different tale to tell Lavished I say

for, taking Mysore there is hardly any grant in aid school that has obtained a single pass certificate for Carpentry Blacksmithing or any other similar trade at any recognized public examination The so called Industrial Schools are only Industrial *firms*, which being heavily subsidised by Government have been killing the local private enterprise, a result the very opposite of that contemplated by Government No tangible signs of *educational* work in them are visible

Next granting for a moment that mission schools are a success, Government can never adopt their principles, for it must be remembered that it is chiefly the orphans that they educate And they naturally compel the pupils to learn the trades taught in the schools Even the boys that are not orphans being chiefly children of Christian parents are under the influence of the Mission authorities, who, if any of their pupils prove a failure in one trade, invariably help them to find employment in another But can Government assume such responsibility and contemplate forcing subjects to learn the particular trades thrust upon them, especially when it is problematical whether the trades will pay after life? Even if some industrial or commercial training could be easily and rightly made compulsory in the case of those attending

school the parents would not waive their right to choose the trades they like for their children

Instances and authorities could be thus multiplied to show that industrial schools especially those intended for the majority of people in India have hitherto not been successful, as the Government of India Resolution of 1904 referring to such schools clearly says Search has still to be made for the kind of institution which will take root in Indian soil

(3) The chief causes of failure and the remedies

Turning next to what is of greater importance to us here, the causes of the failure of such schools we find that they are various and many But we are concerned here only with those that have an educational interest and shall confine ourselves to the chief ones

Now why do so many that learn ~~certain~~ these trades in the Industrial schools turn away from them when they enter life, as has been so repeatedly pointed out in every official report on this subject? And in the next place, why do so many whose caste and hereditary associations naturally drive them to their ancestral callings seek other trades in life? I am not speaking here

of those that seek Government service but of the many that change from one trade to another And again how happens it that the Mysore Census figures (making allowances for all errors) for 1891 and 1901 show a marked decrease in population under certain leading industries like Wool and Fur and Cotton and Hardware (iron) while they show a disproportionately large increase under other heads such as the 'Preparation of food stuffs etc and Tailoring and Silk ? (Vide Part I Page 734) This cannot be attributed wholly to individual whims and tastes. Among all the causes that bring about these results the most potent appears to be the fact that the hereditary trade or the trade taught in the school is less remunerative, inspite of the trouble undergone in learning it at the school or under the parent, or that other callings pay better for the same qualification in the wage-earner Schools for industrial instruction may be opened by the hundred and Rupees spent by the thousand, as was done ~~in~~ Japan at one stage, all that will be of little avail in improving the situation Boys will eagerly take to the Courses,

when the first announcement is made as they have often done in the past whenever industrial schools were opened But when in the course of a year or two, the novelty wears away, when their minds are disillusioned, that is, when they come to see that school-taught trades do not pay in the life they will desert the schools Or if to cover this defect in the system, scholarships be continued, poor men will continue to send in their children for the sake of this small advantage so long as it lasts But no sooner the pupils leave school than will they naturally pursue occupations that pay their capacities best Further, when the parents see that the training given in the industrial school does not bring in more wages, they will rather keep their children at home than send them to such schools I have repeatedly asked a number of villagers whether they would send their children to 'trade' schools if such were started in their villages The uniform reply has invariable been Yes if we can earn something more thereby

It is this this economic and commercial value

of the teaching that chiefly determines the success of such schools, or in the words of Mr Cumming one of the latest Indian authorities on the subject, this factor is an assured livelihood And wherever this factor has been overlooked the school has not thrived

This seems to be an obvious truism Nevertheless it has been much ignored in India To emphasize the importance of this inseparable and intimate connection between the economic and the educational aspects of Industrial Training let me quote a pregnant sentence from Professor Sadler, one of the highest educational authorities He writes in the chapter on this subject in his Reports Volume II, In his testimony Dr W T Harris (Commissioner, United States and no less an authority in matters educational than Professor Sadler) with characteristic thoroughness and insight deals with the subject (of Industrial Education) quite as much from the economic side as from the educational

Another equally important circumstance that has contributed to the failure is the

want of competent teachers As this fact however, is fully recognized by every one dealing with this subject, I will not say anything more on this head

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These two important causes, Japan has tried to remedy. like many Western countries. by means of what are known as 'Experimental' institutions which also serve as Normal Training schools for Industrial teachers The importance of 'experiment' not only in developing agriculture, but also in making Agricultural education a success has been fully recognized by the British Indian Government (Vide the Government of India Resolution 1904 Para 37. But they do not appear to have thought it equally necessary to adopt the same course in their industrial or technological, institute of the recommendations of the Col Clubbons Committee In Japan the experiments in the Colleges and institutes and the subsequent demonstration especially at the elementary Schools have convinced the agriculturists commercially profitable it is to train up their boys in the modern Agricultural

Schools which they were fighting shy of
were actually given ocular proofs of the
economic advantages What is more the same
method has shown the industrialist in Japan in
what ways he could make his trade more lucrative
For fear of being too lengthy I shall quote but
two passages

The Technical College of Tokyo This school was
remarkably successful in its experiments with
silk-weaving Umbrella fabrics, Earthen Ware etc
so much so that people interested in umbrellas
began to come in order to see how the stuff
was made This school has attached to it
also a Supplementary school of industry and
an institute for training industrial teachers
It has throughout exercised a very great
influence on the Industrial progress of Japan
by supplying both technical workers and
teachers (Professor Sharp's report)

The Department has tried to get over this
difficulty (of finding competent Industrial
teachers) by devoting a part of the money to
the training of teachers Training institutions

have been attached to the Agricultural to the Technological and to the Commercial colleges of Tokyo (Baron Kikuchi's Japanese Education Page 353)

The chief function of Industrial Schools

Suppose, in a village or small town a Basket maker a carpenter, or a Blacksmith has three or four sons when these grow up and set to work on their account all the three or four cannot find enough work, for, the needs of the village or its neighbourhood do not treble or quadruple in a generation While in some trades the needs may increase, in others they may decrease, or, there may be a fall all round To add to this, there is the powerful factor of foreign competition And this is what the three or four sons usually do One follows the fathers calling, and some times two The remaining sons take to agriculture a a rule if they have capital, or become coolies and mendicants if they be poor and ignorant They cannot turn their hands to any other trade in the same locality or elsewhere excepting big cities for each of the trades unless fortunately plague carries off its working hands has the same difficulty to combat If any of them be intelligent however, they proceed to towns and cities to try their luck there

Even in Agriculture the lands get divided and subdivided and many are obliged to seek their livelihood by entering other callings unless they have capital enough to cultivate more lands. Though actually every artizan may not have three or four sons yet it will be clear that our present disease is not want of hands but want of work. And work cannot be found for various reasons, the chief of which are (1) want of Capital and (2) want of knowledge of "new industries" or "new methods". This committee is not concerned with the subject of capital. Then, it is asked of what use is it to teach in a School all the sons of the Carpenters and Blacksmiths and Basket weavers their hereditary occupations when there is not enough work for them all? The Government of India's principle that pupils of the elementary Industrial Schools should be made to learn only their fathers trades is evidently unworkable except in probably in large cities. If the object then of the school is only to teach the old known processes at well, having the advantage of a Government subsidy, only by to multiply hands without regard for the economic conditions; which

will make the remedy worse than the disease, and the people will naturally turn away with disgust from such instruction as they have done already in the case of Industrial Schools

To earn a living one has to follow either the father's trade or a new one In the former case if the pupil is to earn by working according to known methods or processes no school can teach so efficiently as the farm or the work-shop of his father or of some of his friends If on the other hand, the pupil has to learn any new methods or new trades that would pay him better, he may and will have recourse to a School The school has therefore a useful function to discharge only if it teaches, in addition to what is known, new methods or new industries

Such new methods and new industries could be learnt only from experiments made with reference to local ~~and~~ economic conditions 107 And to teach them experiments and training of teachers must precede the attempts to teach

13 A general consideration of the Scheme

Reverting to the main subject from the above necessary digression, we may consider the various factors of the scheme the light of what has been just said

(1) Elementary Schools

The Mysore Educational Rules do not clearly indicate what is meant by Elementary? It is usual to treat the lower and upper Primary grades as Elementary Pupils would then be only 9 years of age when they finish the Elementary Course. Again the word elementary is made to cover the period from the sixth year to the eleventh of a child in some cases, (Vide Mr Bhabha's special Report Page 129) whether the age be 9 or 11 at the time of finishing the elementary course it is literally impossible to teach any trade so as to enable the pupils

to earn a living, on leaving school And one of the great problems of modern education is, what to do with boys that leave school when then are still physically and morally unfit to become wage earners In Japan the Elementary course lasts up to about the fourteenth year So also in America According to the latest authorities for success as craftsman one ought to possess not only physical strength' but also a sense of responsibility and mechanical ingenuity' together with resourcefulness judgment and adaptability qualities which cannot be developed at a very early age

In Mysore it is desirable, therefore to treat for purposes of industrial instruction, even the period between ages 9 and 13 as Elementary, though it is called the Middle grade period, (Vide Page 1 Part II of this note for a tabular view)

2 <u>The drawbacks of the existing curricula and remedies</u>

As a corrective to the exclusively literary character of the existing curriculum of studies in the Elementary (the Primary and Middle grades) some practical work in the shape of Kindergarten and Manual training was introduced by Mr Bhabha some time ag

But his scheme has not yet been assimilated into the system so far as the lower grades are concerned all that is needed now is only to adopt his scheme more completely

But this practical work is considered inadequate for the classes above the primary grades, that is, for boys of above nine years of age Many such lads discontinue their studies owing to natural incapacity or domestic difficulties Though some of them may go up even to the Lower Secondary Standard, yet they fail to attain that degree of literary proficiency that will enable them to enter the more intellectual walks of life In such cases the exclusive attention paid to literary studies, coupled with the loss of touch with the trade work of their parents has made a large number altogether helpless in earning a living Many young lads are compelled to pursue a literary course though they are naturally unfit for it, merely because there is no technical or industrial alternative and because they are too young to earn wages

As a remedy ~~against~~ for this state of affairs, it is considered necessary to devote a portion of the time to the teaching of some handicrafts in the

classes through which pupils of above nine years pass

As it is not considered desirable by some of the est authorities to effect a divorce between the literary an' the industrial sides of education even between ages of nine and thirteen, sufficient provision should be made for both The Government of India Resolution lays down the uniform principle that in the Primary Schools the work should be so divided that half the day is given to each But even at the age of nine not to say anything at lower ages, this will be felt a great strain It appears more desirable to have a scheme sufficiently elastic so as to suit the different ages of boys as well as their intellectual an physical capacities and natural tastes

In the case of pupils that give up the literary side altogether and confine themselves chiefly to the industrial more time could be devote to practical work and the Industrial Course could be finished in a shorter period

If, on the other hand the two sides be pre-sented together the course must be of longer duration

To find time for industrial training such

subjects as History and General Geography which may not be of much practical use may be given fewer hours Drawing the most important subject now not only from the point of view of general education, but also from that of the Industrial, should be introduced

The Japanese curriculum which has been drawn up after a most careful study of all the European and American ones, may be taken as a model But it cannot be adopted fully as the Mysore system of Elementary Education differs from it in some respects And what is wanted here is a scheme that would give us the facilities of both the combined and separate types of Industrial schools of an elementary character

3 Where to commence and end Industrial Training

It is now everywhere admitted that some elementary instruction of a general character is necessary for a boy or girl before he or she begins to learn a trade And the age at which Industrial training should commence is fixed differently in different countries Some countries like Japan commence at the age of 12

others between 13 & 16 But in many of these countries especially in the mills and other large factories wage earning begins comparatively early, which has a most un-desirable effect upon the industrial class as a whole

As to where it should end, it must vary with the standard of instruction given There are three year courses four and even five year ones for even an elementary kind of training Then there are longer courses for higher or advanced studies

In Elementary schools where combined literary and industrial instruction is given in America (Chicago, for instance, as the University Elementary school, Chicago) three years is the length of the industrial course In Japan in the Supplementary and B Schools 1-4 years' training is prescribed Further, even the shortest course required according to the Madras Educational Rules for one to become an artizan is one of four years In France the courses run from 2 to 4 years, in Switzerland 2 to 5 years and in England 2 to 4

In the face of these facts it is really difficult to understand what the Government of India Resolution means when it says in para 12 That the boys in the Primary' and Higher Primary' schools should learn under approved artizans the

the trade "thoroughly and not merely the elementary processes" In the first place such pupils can have no preparatory grounding at all in general education In the next in the 'primary' classes pupils will be between five and eight and in the higher primary about 9 years of age What trade the Government of India thinks could be taught from the fifth [the] eighth or ninth year so as to produce "artizans who will rise to a distinctly higher standard both of general intelligence and of manual skill than can be obtained by the ordinary traditional routine" (Para 11) it is not easy to guess, unless the pupils in these classes be of higher ages

In Mysore then both on the ground of age and on that of preliminary general instruction it is advisable to commence from the IV class in the Vernacular schools or the II class in Anglo Vernacular schools and to prescribe courses according to local requirements

At this stage the boys will be as per Departmental Rules between 9 and 13 years old But in actual experience, the boys especially in places other

as possible they must be satisfied with manual Training, which will also be of great help to them in life. or, they may be allowed to join one of the schools giving Industrial Instruction and undergo Industrial Training alone for two, three or four years according to their capacity This may be allowed as a special Industrial Course But no boy below nine years should be admitted.

4 <u>The Course of Instruction.</u>

It has been pointed out that the length of the course should vary with the needs The course of instruction should be such as to give a boy as much knowledge as is necessary not only to enable him to earn a living but also to make him a better wage-earner than a fellow tradesman without this school training Now the lowest grade of such course for Indian conditions is that prescribed for the Madras Elementary Technical examination, which covers the four standards A, B, C and D as given in the Mysore Educational Rules Part II, Page 54 Now this course of four years is an elastic one It can be shortened to 2 or 3 years, if need be, as I have it on the authority of a

good foreman who has himself passed through the course The shortening will depend upon (1) the nature of the trades learnt, (2) the age of the pupil and (3) the time devoted exclusively to it At any rate two years would be the least time required

Public Examinations and the granting of certificates are absolutely necessary Else the work done by the teacher will be a sham as is now the case with number of Industrial Schools

5 The number of hours for Practical instruction

The time allotted for practical work varies with different countries and in the same country with different Schools Again one hour a day will be too much for some trades and 5 or 6 hours will not suffice for some others like Agriculture A separate and special table of working hours is required for the Agricultural class But as for the other industries '4 to 6' hours a week would be enough as the Madras Educational Rules say (Vide Hints and Suggestions on the management of Industrial and Technical Schools) Some leading Schools of America give 9 hours a week for 3 years and 4 to 5 hours a week in advanced classes,

in Japan in the elementary grades of schools about 6 hours a week is devoted In more advanced ones 18, 22 and 28 hours are devoted to practical work Considering the physical capacity of boys of this country and also the standard of work to be turned out, 6 hours a week for four years in Anglo Vernacular Schools and 6 hours a week during the first two years of the Vernacular school course and not less than 18 hours a week in the years devoted exclusively to Industrial Instruction ought to suffice I have been further assured by the practical foreman that I have already referred to, that has passed the Madras course here remarked that this allotment of time would be adequate.

6 The teachers

That the want of competent teachers is one of the greatest difficulties in Industrial Education has already been pointed out It is a great mistake to appoint men who are teachers in the literary for this work also howsoever much they may know of the theory

The men that are first appointed must

especially be of as high a qualification as possible as they have not only to produce the best impression the impression that it is really profitable to pursue the trade taught in the school but also to train up the future teachers

Every teacher must not only possess practical knowledge but also be up to date in his trade business as well as in the methods of teaching it For this purpose it is necessary to have, as in Japan, Teachers manuals prepared with special reference to local conditions for each industry taught in the schools

For Manual instruction, in addition to the training that teachers get in the normal school Mysore, they may be given some training in the industrial school at Mysore in cane work and the like They may also attend a short course say, of three months, in practical instruction

at the Lal Bagh, Bangalore to enable them to ~~the~~ school gardening work

7 · <u>Industries to be taught</u>

In the existing conditions it is not every industry in the country that can be taught in a school Only such as the teaching of which will convince the parents and pupils of the economic and commercial advantages of pursuing them on the lines taught should be introduced There are a number of fallacies in the methods adopted in determining the teachable industries Without going into details I may point out a few

(1) It is generally assumed that a school, for teaching an industry for the products of which there is a <u>great demand</u>, will thrive Seeing that for articles of Iron and Wool there is almost a universal demand I have often asked the village Blacksmith and the small Kumbli Weaver whether they would be glad to have their sons trained in their trades Their reply was to the effect of what use is it to learn to produce these articles in these days, when even the

smallest nails and agricultural implements from foreign centre are sold so cheap in our villages? Of what use is it to learn to make Kumbies when machine made blankets can be purchased at such low prices? Sir if you can teach us anything new or any method by which we can earn more at these trades we will gladly send our children to your school Though there is a great demand there is a corresponding supply from other sources which it is not possible to compete with howsoever many may be the number of hands working on the old lines

2 Again is it the existence of a very large population practising a single industry at one place that can determine the success a school? Let us look at our schools at Chuknayakanhalli and elsewhere, or better still, let us look at Salem, one of the most noted centres of cotton cloth manufacture It has a very large weaving population From the Educational point of view, the Government factory there proved a failure (vide Mr Chatterton's paper in the Report of the first Indian Industrial Conference), inspite of the direction of a highly educated Specialist like Mr Chatterton Evidently there the parents loom was found a better school than the factory

3 Abundance of raw material in the neighbourhood for industrial purposes, is considered —

another ground for teaching a trade Buttons made of Cocoanut shells or such other curiosities are pointed out as strong grounds for starting schools Fine mats made out of rushes and the like are spoken of in the same strain But the qusto is will they pay if pursued by a large number? If so, under what conditions should the manufactu be carried on to make it pay? They may be taught in an industrial School maintained by Government or in a manual training School merely for the exercise or pleasure they give — But will the people take to the industry if it does not bring in sufficient profits in life

To the same category belong the attempts at making Candles and soaps in the malnad especially the latter, though it can be practised as a cottage industry Nor is the case different with dyeing, though it has a very bright future before it in Mysore

"It is generally argued that what is wanted for the Agriculturists is only sound instruction in Agriculture Here is what that

high authority Dr Harris whom I have already quoted says It must be remembered that a population that is entirely engaged in Agriculture may double or treble its production by transfer one half of its agriculturists to the work of manufacture and Commerce If economic Science teaches this truth is it desirable to open only a school for agriculture where the population consists largely of agriculturists?

Again a difference has to be made between city trades and Country or collage ones, from the educational point of view They require different types of schools

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The details of this subject are too complex to be considered by this Committee here It will, however, be enough to point out that what may be a safe guide for us is a resolution of the Annual convention of 1909 of the National Society for the Promotion of Industrial Education United States "Each Trade School must choose those trades for which there is most urgent need

To ascertain definitely what industries could be taught and how they should be taught so a

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to be economically advantageous we require an experimental institute as in Japan Without such institutions no scheme of Industrial Education will be a success in India But as the organization of such institutions require time, the next best course should be adopted A Special Committee may be appointed to make enquiries and publish every seven or ten years, Reviews somewhat like Mr Cummings Review of "the Industrial Position and Prospects in Bengal, with special reference to Industrial Education" The Industrial Survey now contemplated by Government does not appear to cover this ground

How Industries should be taught

Nowadays when a pupil tries to apply in life what he has learnt in the School he finds himself at a disadvantage, in as much as he neither has a well equipped industrial school with a number of unpaid or low paid pupils working in it, nor get a subsidy or grant from Government, nor is paid a monthly salary by any body In other words the teacher only directs the pupil to do so and so when t starts life

But what is wanted is that the teacher should place himself in the position of the wage earner and see if what he teaches would really bring him a living The 'do as I say and you will get on' method is the bane of Industrial School-teaching The 'let me first do as you will have to do when you work for yourself' method should replace it

In short unless there is some assurance that a trade will pay, no parent will send his children to school to learn that trade The assurance can be brought home only by practical demonstration in the workshop or in the farm

The conservative nature of humanity in general will make people hesitate long before adopting even the most useful measures, if they be new To give a single instance Doctor Harold Mann says in his paper contributed to the First Indian Industrial Conference A friend of mine took up some land in Assam to cultivate for ordinary country produce Trained as a farmer he at once adopted methods which appeared strange to the ordinary cultivator of the locality, but which cost little or nothing to do As an illustration he changed the method of yoking the oxen to the plough which considerably increased the work they are able to do At first the surrounding ryots laughed and ridiculed Within a year they

had adopted the same method

Now a hundred books on Agriculture may have taught in the Lower Secondary classes or a hundred issues of the Agricultural Gazette may have published or a hundred lectures at the exhibitions may have expounded this idea first All of them together would have hardly succeeded in producing an effect equal to that produced by this single demonstration A demonstration which impressed upon the ryat not the novel or tamasha sid but its economic advantages

9 The number of Schools

The difficulties (1) of finding competent teachers (2) of selecting such industries as will pay ~~x~~ Dasent in School and pursued and (3) of producing a good first impression on the people (it will be remembered what great importance should be attached to 'impression' in the connection with Industrial education) necessitate the exercise of great caution in fixing the number of schools to be organized at the commencement

It is laid down by a body of experts (Vide Sadlers Report Vol II, Page 198) that the development of trade school instruction depends to a very large extent upon the needs and the character of the people for whose benefit the instruction is given As such we require especially local men who

can understand the country best, for teachers

But at the starting we may not find so many qualified hands here Further the sudden organizations of a new Department or sudden expansion of an old one on a large scale, necessitates the importation of outside men even for work that could be better turned out by the natives Lastly of the first batches that are trained do not readily find openings The disappointment will seriously retard the progress of Industrial Education by discouraging others coming after them And if those that are appointed first must be experts or specialists. They will have to be paid high salaries

Japan developed her system of industrial education very cautiously Although, says Baron Kikuchi in 1908 a beginning of technical education, more especially ~~xx~~ its higher branches has thus been made, yet it is within recent years perhaps within the last ten years that great impulse has been given to the technical education in all its gradations Japan began with those Schools which they have now been converted into central experimental institutes and then slowly opened other institutions

It is, therefore, highly desirable that the number of schools giving industrial training should be very limited at first

Equipment

As the object of the present scheme is to teach

such industries as can be practised chiefly in small places and by the poor artizans, costly machinery or processes, or implements are out of place in such schools What is practised in the workshop must be adapted to the circumstances of the artizans and yet have economic advantage

Next a large number of pupils at the beginning is highly inadvisable, for, many of those that rush in at first will eventually fall off And among boys this is a contagion that will rapidly spread which will retard the progress of the school

Further it is better to equip fully a small class than to equip inadequately or badly a large one For if the teaching should fail to produce the right 'impression' at the beginning more harm than good will have been done to the cause Parents and pupils will shun the school And subsequent efforts will be uphill work

Again authorities on the subject hold that 12 is about the largest number that one teacher can satisfactorily manage in the workshop

Separate buildings and demonstration farms are an indispensable necessity They do not require

much comment here

What is wanted, at the beginning, is a small number of schools small classes well equipped and a small number of teachers well qualified and well paid and appointed under the conditions noted in the scheme proper

Girls

The question of teaching the trades to girls has not been separately considered in as much as the number of girl pupils likely to undergo Industrial training may not be many at the commencement However handicrafts like Bamboo and Ratan work Tailoring and mat weaving may be taught to them wherever a sufficient number seeking such instruction are available If girl pupils be above eleven years of age it is absolutely necessary to have them taught by females

Many other subjects may be introduced if people evince more interest

12 Some last words

I It will be clear now that in the case of General Education the question of calling or profession or anything calculated to fix a pupil to a particular course of life and a particular standard of wage earning is absent And the work of spreading such education can be carried on without much concern Whereas in the matter of Industrial Education the subject of enabling one to earn his livelihood, and of giving some shape to ones practical life are directly involved And men will hesitate to pursue trades that will not pay Unless there is some assurance that the trades taught will be comparatively profitable, the schools, though only of the most elementary type, will not be a success

No doubt, crafts like Basket making, mat weaving Tailoring and country shoe-making, especially the elementary stages of them do not require any superior skill and as such may not require any serious consideration for teaching them in Village schools But when the scheme aims at multiplying hands the economic sphinx presents herself and

demands an answer If we should, therefore, start industrial instruction without due consideration to the local and economic conditions we shall only be repeating the past errors and wandering aimlessly

The choice of industries to be taught, and where they should be taught and on what lines the teaching should proceed, to be commercially and economically advantageous should all be investigated with special reference to local conditions, by a small Committee of men, with a good knowledge not only of the educational but also of the economic conditions of the country, or rather of men who can look at things from a sound economic stand-point They must study each subject on the spot and make a report as have done the special committees or officers deputed by the British and other Governments for such purposes

No scheme of Industrial Education can be said to be complete, and can be a success in any sense, until it is coupled with its sister commercial education You must not only be

able to produce articles but also to find a sale The one without the other is bound to end in failure And I may add That this holds true, even in the case of the most elementary stage of industrial education And so far as the elementary aspect of this subject goes, I have considered it and proposed "Commercial correspondence etc" as one of the subjects to be taught The point however deserves more serious consideration than I have given to it in this note

Faithfully yours.

[illegible]

Part II

The Scheme in View

The connection between the scheme proposed and the existing system will be seen in the following table. The necessary alterations in the existing curricula of the Elementary schools are noted in the sequel

Pupils age	Vernacular Schools			Proposed Industrial Training or Manual Training		Anglo Vernacular Schools		The courses in the Industrial Training
	Grade	Standard	Final Examination			Class or Standard	Final Examination	
12 13	Middle			Standard D	Industrial Training	VAV	English Lower Secondary	The standards A B C and D for the principal industries as in the course of instruction for Technical Schools Mysore Educational Rules Part II and in the Madras Educational Rules
11-12				Standard C		IVAV		
10-11		V	Vernacular V Lower Secondary	Standard B		IAV		For Agriculture and Sericulture special Syllabuses have to be drawn up
9-10		IV		Standard A		IIAV		
8 9	Upper Primary	I		Kindergarten or Manual Training		IAV		Kindergarten and Manual Training to prepare pupils for Industrial Training as now taught in the Mysore Normal School and as further elaborate by Mr H J Bhabha at the end of his Special Report on Manual Training
7 8		II						
6-7	Lower Primary	I						
5-6		Infant						

Industrial training will be optional but ~~com~~ Manual Training will be compulsory in the absence of ~~the~~ Industrial

No Industrial training will be given to a child till he is fully nine years of age and till he passes either the Vernacular.

or the Anglo Vernacular I standard At this stage he will have five alternatives open him

(1) The Industrial course alone of two or three years according to physical and mental capacity and according to the nature of the trade learnt

(2) The Industrial together with the Vernacular course (for the Lower Secondary Examination taking a three year Industrial course

(3) The Industrial together with the English Course (for the Lower Secondary Examination) taking a four year Industrial course

(4) The Vernacular course alone (without the Industrial)

(5) The English course alone (without the Industrial)

There is also a subsequent Sixth alternative

After joining the Vernacular IV or the Anglo Vernacular II standard, he may, at any stage discontinue the literary side and turn exclusively to the Industrial taking a two' or a three' year course according to capacity and nature of trade

As for the present Industrial Instruction will be given only in the Schools of the Lower Secondary standard, and pupils of Lower schools in the villages have to go to places

where industrial training is available scholarships should be given to the poor among them

Whatever the length of the course the industrial curriculum covers the same ground that is the four standards A, B, C and D In the case of the two year course A and B may be taken in the first year, and C & D in the second More than half the day should be devoted to practical work.

In the case of the three year course A and B must be gone through in two years, and C & D combined in one (third) year More than half the day should be devoted to practical work in the third year In all other cases one hour a day should be given to it During the first year the pupils preparing for the Vernacular Lower Secondary Examination cannot devote more than an hour After the examination a whole year may be spent in the industrial class alone

In the third year of the three year course no other literary studies should be pursued in school Than English and Drawing This English should be such as to enable him to join the English classes later on, if necessary

The four year course is spread out so as to enable the pupil to find time to study English and other subjects for the Lower Secondary Examination, One hour a day, uniformly throughout is all that

That is required for practical work

Both in the Vernacular and in the Anglo Vernacular schools the pupil will go through the Industrial courses, irrespective of the promotions in the literary classes

If there be a particularly weak pupil any of these courses may be extended by another year at the discretion of the parent

In case no industrial training is gone through, the time allotted to it should be devoted to School gardening and Gymnastics In the classes below the Vernacular III or A V I or when a pupil is below nine, Manual Training is all that can be given It gives the pupils the elements of industrial training in such crafts as mat-weaving, basket making, gardening and the like

Time devoted to the several subjects

In the IV and V Vernacular Standards and in the IV and V Anglo Vernacular Classes as well the pupils generally do 27½ hours of intellectual work a week This has been reduced to 24 in the former and 26 in the latter by cutting down the time allotted to certain less important subjects Drawing, whose supreme educational value is now universally recognized has been included Provision has been made for 6 hours of shop work in the former classes and 4 hours in

The latter This may be treated as physical exercise or recreation work

The following table shows the existing time table (only the approximate number of hours is given for sake of convenience) and the proposed one as compared with that of the corresponding stages of Elementary Instruction in Japan

Subjects	Existing		Proposed		Japan	Remarks
	Ver	A V	Ver	A V		
Religion and Morals	2 ½	2 ½	2	2	2	The optional Subjects in Japan are Agriculture 2 Commerce 3 English In Mysore Agriculture 2 Mensuration 3 Sanskrit &c
Mother Tongue or First Language	10 ½	10 ½	8	8	8	
Arithmetic { English or Vernacular	5	4	5	4	4	
History and Geography	5	3	3	3	3	
Hygiene or Science	2	1	1	1 ½	2	In the general Education schools Japan gives Manual Training and Agricultural instruction No other industries are taught But in Industrial Schools of the Elementary type instead of manual training, industries with practical work are taught
Optional Subjects or Language	2 ½	4	3	3	4	
Drawing			2	2	2	
Gymnastics and Drill		2		½	3	
Manual Training		2		2	2	* Should be devoted to Gymnastics and School gardening if no industrial work is done
Industrial Training			6 *	4 *		
Total	27 ½	27 ½	30	30	30	

In the third year of the three year course of the pupils of Anglo-Vernacular and Vernacular Schools

English	9 hours
Drawing	2 hours
Materials and their sources and uses	1 hour
Industrial Training	18 hours
	30 hours

In as much as the additional 2½ hours of work comes in only as physical exercise or recreation work it will be no strain So, the boys are expected to work for six days in the week at five hours each

The minor changes of a similar nature in the Time table of the II and III Anglo Vernacular classes do not need to be pointed out here

For the special industrial course for boys that attend only the 'trade' class or practical work class no special hours need be fixed

Industries to be taught and Centres

For reasons assigned in Part I twenty centres may be opened the first year and the number multiplied subsequently as experience is gained Only one industry should be taught, at the beginning, in each school But carpentry and blacksmithing, or rope making and mat weaving, or Bamboo and Ratan work should be treated as one industry

The industries recommended for the present are

A for Vernacular Schools

1 Agriculture

2 Weaving (Cotton and Silk or Wool)

3 Bamboo or Ratan work

Bamboo

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4 Pottery

5 Rope making and mat weaving
(with rushes as well as Coir)

6 Sericulture

7 Shoe making

8 Agriculture

-for Anglo Vernacular Schools

1 Gardening and Agriculture

2 Carpentry and Blacksmithing

3 Wood turning and Toys making

4 Metal work

5 Book binding

6 Dyeing

7 Tailoring

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(8 Book Keeping and Commercial correspondence
(Indian and English Systems)
- If the Committee approves plus -

The twenty centres should be chosen one or two for each District, excepting Mysore and Bangalore which may have more The schools situated in places having the largest population of the particular Industry proposed to be taught should be selected at the first trial

Mysore 1 Silk weaving, 2 Carpentry, 3 metal work and 4 Agriculture

Bangalore 1 Tailoring 2 Shoe making, 3 Dyeing and 4 Book binding

Kolar 1 sericulture and 2 Agriculture

Tumkur 1 Rope and mat making 2 Carpentry and Black-smithing

Hassan 1 Metal work and 2 Agriculture

Kadur 1 Pottery and 2 Basket & mat making

Chitaldroog 1 Weaving (silk or wool) and 2 Agriculture

Shimoga 1 Sandal and other wood work 2 Agriculture

Seeing that the first impression produced is a very important factor, I should strongly advocate the starting of such instruction as far as possible in the District Head Quarters, where some intelligent supervision and direction is possible For Carpentry and Black smithing particularly, District Head quarters seem to possess special advantages. Further people from all the parts of the District would meet there and spread a knowledge of the usefulness of instruction easily In the case of District Capitals two industries may be taught in each school

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Teachers

A special and separate teacher should be appointed for each School Sometimes the same master can teach two closely allied industries, such as Carpentry and Blacksmithing, Bamboo and Ratan work Further the special teacher can give the requisite

instruction in Drawing for the whole school So, twenty experts, that is, men that have not only passed from the Bombay, Madras or other technical Schools but also worked for a time in some farm, Garden, Workshop or firm should be appointed, on thru or five years probation Confirmation or promotion should be dependent upon their satisfying the controlling authorities that the trades taught are commercially advantageous to pupils in earning a living It is not meant that the School should be made self supporting But the teacher should show, taking into consideration the outlay, that a pupil will be able to earn the wages of a trained artizan after leaving School

If competent men cannot be found even for these twenty Schools, such select Mysore students as have a decided taste for industries should be sent to Bombay or Madras and trained Till then only as many Schools as competent masters can be found for, should start work

The appointment of a teacher should, in each case, be recommended by a Committee of thru officers two of whom belonging to the Educational Department

and one to the Public Works Department, after examining the practical work of the applicant This rule is highly necessary to avoid the mistakes often made ~~often made~~ in appointing teachers of this class

In the case of teachers for 'school-gardening', arrangements must be made for one master from every School in the Province undergoing a course of training, for three months, in the Lalbagh, Bangalore under the Curator or the Superintendent

Equipment

To begin with, the number of boys learning any industry in a school should be limited to twelve or if more seek instruction They may be divided into batches of twelve or less In some cases to set up, even on the smallest scale, a workshop for instance of Carpentry, for a dozen pupils, will require a large sum And a single teacher cannot attend to a larger number when they are at practical work

The School buildings are generally too small to provide accommodation for the workshop A separate but small house near the School must be rented As for Agriculture a

demonstration farm being the first requisite, some two acres of wet or garden land should be attached to the School Bulls need not be purchased They may be hired whenever the need arises A few tools and implements have to be bought

As for manual Training which is the chief practical Training that the boys of the primary grades can get it is necessary to provide facilities as liberally as Government can School gardening deserves special attention

(1) In every School of the Lower or Upper or Middle grade that has convenience for watering the land for purposes of cultivation a 'School garden should be started An acre or two of land ~~for the purpose~~ should be given to the School

Where watering facilities do not exist the teachers may be asked to teach some practical garden-work during the rains only The School compound if it has any, if not, a plot of uncultivated public land near the village may be permitted to be used during the season

(2) The Superintendent of the Lal Bagh, Bangalore should keep in stock a good supply of seeds

and plants and distribute them gratis to schools when required and recommended by the Inspectors

Scholarships It is absolutely necessary to give scholarships (1) to those boys that leave the Primary schools and go to the centres with schools teaching industries and (2) to those that continue for a year after passing the Vernacular Lower Secondary Examination They should be tenable for two or three years in the former case and one year in the latter

As they will have to maintain themselves Rs6 in the case of those that come from places other than that in which the school is situated and Rs3 in the case of the natives of the place may be given

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Cost

As for the cost of filling up the workshops for carpentry, Smithy, Bamboo or Ratan work Weaving Metal work etc and for providing the necessary tools and implements for Agriculture for dozen pupils in each case I am not in possession of full information yet I shall submit a supplementary note on this point later on

Turnbull

Chief Inspector

Appendix B

To,

1 Shamal Rai, Esquire, M A ,

President, Practical Instruction Committee,

Mysore, T U M K U

Sir,

I have the honour to submit the following Report on the tour I made partly in May and partly in June last

THE OBJECT OF THE TOUR

1 While in the case of general education it is possible to formulate a uniform scheme applicable to all or a majority of the schools in a Province, it is impossible to do so in the matter of Practical and Industrial Instruction, however elementary it may be Every scheme that has for its aim the training of children for later practical and industrial life must take into consideration the local economic, industrial, and social conditions, which naturally vary in different places The pupils must ordinarily be given an education that would enable them to thrive in the environment that the industrial, economic and social conditions of the locality may determine, or may have determined, for them

2 With a view, therefore, to ascertaining how far the local conditions in the Province would favour the introduction of any of the proposed schemes, what the existing situation actually requires and how far the experiments hitherto made in giving 'Industrial" instruction in some places was a success, I was deputed to visit one of two typical centres in each of the eight Districts of the Province

THE PLACES VISITED.

3 The following centres were selected,-

Chickna rakanahally, (Tumkur)

Davangere (Chitaldroog)

3	Agumbe)	(Shimoga)
4	Sagar)	
5	Mudigere	(Kadur)
6	Holenarasipur)	(Hassan)
7	Sravanb l gola)	
8	Honnur)	(vsore)
9	Nagamangala)	
10	Magadi)	(Bang lore)
11	Doddaballapur)	
12	olar	(Kolar)

4 Further, all such places of educational and industr al interest on the war to and from the centres, as well as near them were al o permitted to be taken As my summer vacation was however over by the time I finished four Districts, I co ld not complete the work assigned to me

5 The places visited are -

1 Chikna rakanahally
2 Dav ngere
3 Haribar
4 a ra onda
5 Tudurghatta
6 Thirthahalli
7 Nagervalli
8 Nalur
9 Agumbe
10 Nal ur
11 Shimoga
12 Ayanur
13 Sagar
14 Tarikere
15 Mudigere
16 Sondekoppa
17 Nakanhalli
18 Ghattadahalli

19 Nandipur

20 Bedarh lli

21 Halekote

22 Phalguni

6 Whenever I went, I visited the general education schools,— the village elementary or Anglo-Vernacular Taluk schools,— Industrial schools if any, and Industrial workshops or factories I also held conferences with the leading representatives of the industries and other intelligent public citizens

ABSTRACT OF MY DIARY AND OBSERVATIONS.

Weaving

One of the most important industires proposed by Government as a subject for practical instruction, is weaving Places like Chiknayakanahalli, Davangere, Harihar and others were visited, as they contained either an industrial school or a large weaving population Though chiknayakanahalli has both these elements yet, (1) not a single pupil of either the kumbh-making or the Cotton and silk-weaving community of that town has sought admission to the local industrial school, though it is seven years since it was started ; (2) Of the mendicant waifs and strays of other communities and places that have gone to the Chiknayakana-halli school solely for the sake of the scholarships not one has till now been able to reach even the lowest of the technical standards of weaving, so as to be able to earn a living (3) Not one that has been a pupil in it has ~~as yet~~ till now started life independently

So much for the Industrial School

2 The weaving and the Kurubar Communities do not allow their children to attend even the General Education Schools, after the eleventh or twelth year of age In this respect Davangere and Harihar resemble Chiknayakanahalli

3 A conference w th the leading men, parents and tradesmen in these three centres revealed the following -

(1) These communities do not wish to give their boys an school instruction in weav ng as the trade is not a pa ing one The wages of the workm n have gone down considerably They sav they are not able to make the two ends meet Though the money v lue of their wages now be ver nearly the same as before, yet the food purchsing v lue of it is only half of what it was some 15 or 20 years ago In some cases even the money value has gone down

(2) The hold that the industrial or practical instr ction given in such schools will not improve their condition For, the improved methods such as the fly-shuttle weaving, are not of m ch use in making fabrics s ch s sadies which are in demand in the local m rkets Hand-mad checks nd other cloths are not able to compete with the imported foreign articles, in as much as the margin of profit left to the workman is too mall for him to live upon Checks are a cheap stuff and only a ver sm ll profit can be made per yard Unless, therefore, the methods taught be such as would ensure the pupils' earning more than they do at present, the parents declare th t the will refuse to send their children to schools teaching the indusries

(3) Some of the poor parents su that the would allow their children to attend ny school provided they are given a decent stipend, and only as long as they are given it For, the believe that by making the children work at home, the could not only give them the best tr ining in their trade, but also help them to earn some wages Send ng the boys to a public school means a real loss to the parents

(4) It must be noted that there is a grad al decline not only in the population but also in the trade of these comm nities

Many K r bars are giving up Kumbli-weaving for agriculture The other weavers are also eager to change their occupation

(5) Eleven years is about the age at which the parents withdr

withdrw their children from school--as it is at th t age th t they can render useful service at home and also learn their trade, earning at the same time some small wages for the family

4 ow, in as much as no trade can be taught before a boy is at least eleven years of age, no pract cal instruction scheme that wo ld enable a pupil to earn his living, can work unless Government can keep the boys of these communities, by compulsion, in schools till the are about fourte n years old and unless Government can make the learning of the weaving industry compulsary If the object of the scheme be however, not to enable boys to earn a living, but only to train the hand and the eye by means of Manual Instruction, as much of this kind of practical instruction a ha been laid down in the Manual Instruction Scheme of r Bhabha m y be introduced But I must clearly point out that in the opinion of some of the latest Educational Authorities mere and l Training is of doubtful utility, as a means of earning livlihood, in a country where machinery is not largely used for industrial purposes nd where industrial organization is still in the infant stage

5 The circumstances militating against the the developm nt of the Kumbli Industry are various, and they are of an economic nature So, I will not enter into them here

6. At present, the only safe and possible course to be adopted appears to be the following -

(1) To make an experiment only at places where Government have established Industrial Schools with a weaving establishment

(2) To so arrange the work of the A V Schools in such places as to make it possible for the pupils to attend the Industrial School for an hour a day in the afternoon

(3) To induce as many pupils of above eleven years of age as possible to go to the Industrial School To attach a weaving establishment to an other general school seems to me, to be undesirable at this stage After experience is gained in these

these few centres the scheme ma be extended In this connectio I would however specially bring to your notice, the facts that Panchamas are eager to learn fly-shuttle weaving And I learnt at Harihar that the cloth required by the Panchama community could be cheaply made by any foreign loom It may be introduced into Panchama Schools The initial cost may be Rs100/- for two small looms

C A R P E N T R Y

1/ This handicraft appears to have a more hopeful future from an educational point of view, though at the Chikmagalahalli school the pupils say that they have joined the school with a view to getting employment in Government service, and not with a view to earning their livlihood independently It is true, as they say, that there is no demand for the sort of work they learn in the Industrial Schools, and that for the sort of work needed in the villages, there are already men enough, children can learn so much of the trade without going to any such school Nevertheless, at places like Thirthahalli and Sagar, there is a considerable demand for carpenters. It is reported that hundreds of wood workers come into these Taluks from North and South Canara, and from Goa every year, and make a living Further the abundance of raw material in the neighbourhood is another inducement to many to learn this trade

2 In select places like Tarikere, Thirthahalli and Sagar, carpentry may be easily and profitably taught in the A V Schools For it is in the A V Schools alone that we find a sufficiently large number of pupils of and above evlene years of age

3 That makes the teaching of carpentry feasible is the circumstance that all casts irrespective of all social ranks are willing to learn it if not as a means of earning one's livlihood, at least as a pleasant manual exercise I found at Sagar

Sagar and Chikmavakanahalli all the pupil cast-s of Hindus and Mahamad ns and Christians learning it It w ll be further noted that the age difficulty does not affect the teaching of this hanicraft in schools There will be a sufficiently large number of pupils of all casts in the A V Schools and in the higher classes of the village Lo er Secondary Schools ready to go in for it Only Primary Schools cannot h ve it The initial cost of purchasing tools will be about Rs 120/- for a dozen pupils The h u e rent and the maistry's salary, and contingent expenses will be about Rs 25/- to Rs 50/- a month No additional or special expenditure need be incurred at places having Industrial Schools

4 The Industrial School teachers at the places I visited unanimously held th t if the Industrial school Curricula and the General Sch ol curricula be combined and co-ordinated t e carpentry class would flourish exceedingly well

BLACKSMITHING

Taking the local conditions into consideration, it has to be pointed out that experting in cities like Ban alore and Mysore backsmithing cannot be taught as n independent subject It is not possible to get a sufficiently large number of pupils for a class in any centre Wherever there is a large Mahomedan population gro n up boys of over ten years of age se m to be desirous of learning this hanicraft But they have no idea as to whether it will be to enable them to earn a living And enquiries go to show that the prospects are not very bright owing to foreign competition

2 The best course, therefore, appears to be to combine carpentry with blacksmithing The two may be taught together for the present Two sets of tools of about Rs 50/- each, will be required for a dozen pupils

BAMBOO WORK.

a / This is gradually dying out Very few children of the

the Kedar or the Korama caste who generally make Bamboo articles, are to be found in any school either at Shimoga or at Tarikere This occupation is not sufficiently paying now a days The basket makers are trying to earn their livlihood either as coolies or as agriculturists The causes that have lead to the decline of this trade are many which need not be gone into here The parents are therefore, not willing to send their children to school unless some assurance is given that their boys will be helped to earn a living

2. The handicraft may however be taught as an additional subject along with agriculture Children of all casts would like to learn it

3 But this trade will have a bright future, and many will send their children to the General as well as the Industrial classes, if an expert from Japan could be got out to teach them to make articles that would find a ready and profitable market At present, the tools required for making ordinary articles would cost about Rs 2-12-0 a pupil or about Rs 30/- for a dozen pupils

2. RATTAN CANE WORK

1 Agumbi is the only place where cane work was to some extent being carried on But the extent to which it has now declined can be realised when it is pointed out, that there is now only one man that is doing that business And even he does not make a means of living If a competent teacher could be appointed on Rs 20/- or Rs 25/- a month, all the boys of above eleven years old in the Agumbi school and at Latur, will readily like to "Cane work" The parents of all casts are eager to get their children taught This handicraft can be made very lucrative if only competent teachers be sent An hour's work a day is enough for two or three years The abundance of raw material in the neighbourhood of these places is a great advantage The subject

subject can be easily made a part of the school curriculum

2 Tools of the value of about Annas 12/- per pupil and a recurring charge of about annas 5/- a month per head, is all that is required

SHOEMAKING

Enquiries at Tarikere and at Chikn vakan halli showed that sons of shoemakers hardly attend any school There is, however, a good field for this trade in the rural parts And if boys could be taught to make shoes of improved patterns also, there is no doubt that a livin could be easily earned The boys have, first to be kept in the school after they are ten or eleven years old A two or three years' course is needed for them

2 The Madigas, however, wish to learn 'Sandal'-making This may be taught in the Panchama Schools A one years course is enough

3 For teaching shoemaking tools worth about Rs 10/- will be required for a set of four boys, or Rs 30/- for twelve For Sandal-making Rs 3/- will suffice for tools for half a dozen pupils

Both these trades can be taught in select places only

POTTERY

4 Of the centres I visited the only place that contained a fair number of pot-makers, was Tarikere Their children are not found in an school there They may be induced to send their children to school and also to learn pot-making But they say that the would not care to send the children to school unless their boys are taught something better then what they know already For, they say, trey can teach their children themselves the trade better and that with profit to themselves A specialist must be employed as teacher, otherwise boys will not come Further enquiry is necessary as regards the initial cost and recurring charges of a pottery class

and recurring charges of a pottery class

COIR ROPE AND MAT MAKING.

Enquiries made at Chiknayakanahalli one of the chief centres of cocoanut plantations were not encouraging The local coir is, the say, unfit for making ropes and mats I actually saw large quantities of it imported from Calicut and other places on the West Coast of India To render local coir useful for such purposes it requires some technical knowledge The subject deserves investigation The making of rough ropes and mats however, be taught along with agricult

HONEY MAKING

One of the most lucrative industries that could be developed in Mysore is honey making And at present it is not one of those industries that are suffering from foreign competition

2 Agriculture is regularly taught in rural schools in civilized countries like England, France, and the United States It is being introduced into Ceylon In Mysore it can be easily made a school subject It may be taught either independently or along with agriculture

3 It is now persued by boys of eleven to sixteen in the Malnads, particularly of Mudigere and Saklespur It will be a very interesting subject not only for Malnad schools, but also for places like Bangalore which have many climate facilities for developing this industry

4 School boys have to be engaged with it only six months in the year From the middle of June to the middle of December there is little to do That interval may be utilised in teaching the boys the natural history of these It may also be made an adjunct to Horticulture or gardening A two years course will suffice

5 No spec al training of the teachers is required The general school teacher can easily pick up the elements of Bee-Keeping and teach the subject

6 That honey-making is a most profitable industry may be easily gathered from a reference to such authoritative writers as Mr Root, the American Author At Madegere, I found that about 150 maunds of it wa being exported every season

7 All castes may learn the industry either for pleasure or for profit

8 All the initial outlay that it will require is a rupee's worth of pots and a few annas worth of wax I shall not here go into the climatic and other conditions that the places selected for teaching it, should f lfil

AGRICULTURE

1 The subject which can be taught in a majority of the schools, and the subject that is eagerly sought for by many parents in the rural Districts is agriculture All most the whole of the strength the Taluk and Village School consists the children of agriculturists or land holders Further it is only here and there that we find facilities for schools for other industries

2 Schools for agriculture may be opened in all most every village that has a decent school going population The special agricultural subject taught in each school must vary with local conditions So this was reserved for a special study at the end of the tour, after acquainting myself with the peculiarities of all the districts

3 I will not therefore go into details here I will only add that wherever I went the teachers and parents with one voice said that a teacher that knows no more than the ordinary root

the tour My inferences, I have to add, may have to be modified in the light of the conditions obtaining in the other districts

Before concluding this short report of my tour I feel bound to record my great indebtedness to the Revenue authorities and the Educational Officers of the four Districts I travelled in, for the valuable assistance they gave me in making my enquiries

I have the honor to be,

Sir,

Your most obedient servant,

P. Subramanya Ayyar

Secretary,

Practical Instruction Committee

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in 1

Office of the Dy Inspector of Schools,
Bangalore District
Dated 13th November 1850

Appendix

To Mr Shama Rao Esquire M A,
President
Committee for the introduction
of Practical Instruction in
Elementary Schools

Not to be composed

Sir, With reference to the copy of the Draft Report of the Practical Instruction Committee kindly forwarded to me for my remarks if any, I beg that you will be so kind as to place the following note before the Committee and invite their most kind consideration to the observations contained in it I beg also that you will be so kind as to submit this note as appendix C to the Report

I have the honour to be
Sir
Your most obedient Servant
B Narasiah
Deputy Inspector of Schools
Bangalore District

Appendix

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A note on the Draft Report of the Practical Instruction Committee circulated for opinion among the members

The object of Government in bringing the Committee into existence, judging from the Govt Order No $\frac{2640-8}{Edn\ 224-09-3}$ of 16-9-1910 is as follows —

(1) To elicit the drawbacks of the present system of teaching in Elementary Schools

(2) To provide measures for their remedy

(3) To provide a Scheme revising the present Curriculum of Studies and providing Practical Instruction

2 Of the Three objects enumerated only the third namely the revision of the Curriculum of Studies forms the Subject of the Draft Report The first two objects are completely ignored The attention of the Committee is respectfully invited to a

Consideration of those two objects as being of the highest importance. A careful and exhaustive inquiry into the drawbacks of the present system of teaching and their remedies is of the most pressing importance, but as this subject is not touched upon in the Draft Report no reference will be made to it in this note.

3 Before proceeding to an examination of the revised scheme of curriculum embodied in the Draft Report, the attention of the Committee is respectfully invited to the consideration of the feasibility of introducing utilitarian Industrial Education as distinct from mere manual Education into Schools of general Elementary Instruction. In this connection the following points deserve consideration:—

(a) The ages of pupils of Elementary Schools even in the IV and V Standards are fixed at 9-10 and 10-11 years respectively (Vide Mysore Educational Rules Part I page 5)

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At such a tender age much cannot be hoped to be accomplished in the way of imparting Industrial Education If it is said that these ages have reference ~~to~~ only to ideal conditions and that the actual ages are higher than those given in the Rules it must be remembered that courses of instruction are designed to suit particular ages and that without the necessary conditions being fulfilled with respect to age, several courses of study like Kindergarten, Nature Study and Sloyd become inappropriate as is actually the case in many schools

(b) If the duty of providing Industrial Education is to be undertaken by the State with profit to the country care should be taken to see that such education is remunerative proportionately to the expenditure of time and money involved in it The history of Industrial Education in many places

places reveals the creation of a class of workmen for whom there is no demand and who have found themselves, in consequence obliged to abandon the industry in which they have received training, in favour of some other calling. In the present state of industries in this country extreme care is necessary to find out which of them are likely to prosper and which not. A minute ~~[illegible]~~ industrial survey of the country and expert opinion as to the future of each industry, native or foreign are necessary before Industrial Education can be seriously discussed. The responsibility of the State would be far greater, should it proceed to make any Industrial Education compulsory without such preliminary inquiry.

(C) It is hopeless to create an era of industrialism in this country by the mere spread of Industrial Education, without

The

The creation of flourishing industries and the spread of modern ideas among the masses. It is well-known that capital in this country is, as a rule shy of investment in industrial undertakings. The present trend of vernacular publications shows that it will be long before any vernacular can come to boast of a literature on the modern side or become available for the spread of modern ideas.

(d) Industrial education undertaken by the state is not likely to be as economical or as much in keeping with real conditions of business, as similar education imparted in private factories to apprentices employed by them in the ordinary course of the business of manufacture. Industrial education in Government schools has a tendency to become theoretical ~~and~~ as well ~~unpractical~~ as uneconomical

1–119
133 – 202 } [illegible]

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4 Turning now to the revised curriculum as shewn in the Draft Report it may be profitable to go over the paragraphs one by one and to note down ~~such~~ such remarks as may appear to be called for

Proposals contained in the Draft Report	Remarks
I Courses of Instruction	
(1) The Kanada Lower Secondary Course is extended by two years and Industrial Education is made Compulsory	As at present constituted, the Course of Study culminating the Kanada Lower Secondary Exam is expected theoretically to extend from the 5th to the 11th year (Vide Mysore Educational Rules, Part I page 53) But actually it extends on an average from the 8th to the 15th year The proposed addition to the Course would extend it theoretically to the 13th year and actually on an average up to the 17th Thus considering the qualifications to be attained appears to be a highly undesirable waste of time and energy
(2) The bifurcation into English Education on the ~~and~~ one hand and Combined Vernacular and Industrial Education	The average age of pupils joining the IV Standard is theoretically assumed to be 9 years the Educational Rules Granting that the ages therein given are

Suite

Education on the other commences when the IV Standard is reached

suited for realising best results from the proposed courses of instruction it is to be noted that a child of the age of 9 year is not capable of entering upon any utilitarian industrial Education or even to handle the tools for such Education

(3) The hours of work allotted to the different subjects are as follows

	Per week
Religious & moral Instruction	2½ hrs
Mother Tongue	7 hours
Arithmetic	4 hrs
History & Geography	2 hrs
Science Subjects phy	2 hrs
Addl Subjects	2 hrs
Drawing	2 hrs
Industrial Training	6 hrs

(3 afternoon lessons of 2 hours each)

To any one acquainted with the practical difficulties of teaching, it will be obvious that the time allotted to the study of each subject is wholly inadequate regard being had to the various branches of study & exercises that go to make up a single subject such as Mother Tongue, or History or Geography, The allotment now proposed amounts to hardly more than one hour per week for every branch of a subject or for each kind of exercise, and this is utterly inadequate That the whole course of study from the IV Standard is extended over 4 years instead of 2 years as heretofore is no gain but on the other hand a serious drawback for in the Elementary stages of instruction work taken up at short intervals is more effective than the same extended over a prolonged period

(4) The Science Subjects comprise Hygiene,

The teaching of these subjects in the absence of suitable text books

Natural Science or Nature Study and Elementary Physiography	Text books and capable practical teachers will be attended with the same difficulties that are found in the teaching of Agriculture and Hyg are at present in the Kannada Elementary Schools A much higher order of teachers and a better class of Text books as well as facilities for practical instruction are necessary for the teaching of these subjects than can be made available in the Elementary Schools in the near future
(5) The additional subjects comprise (1) Book keeping, (2) Domestic Science (3) Ambulance and (4) Nursing	The remarks in the above para (1) apply equally to these additional subjects The general Elementary teacher ~~however~~ even if he ~~may be~~ is trained in the Normal Schools for the short period of a year will be unable to cope with the Science subjects and the additional subjects as well as with the Industrial subjects
(6) The same teacher will teach the IV & IV A classes so also the V and V A	Where the number of pupils in the IV + IV A classes together or the V & V A classes together is sufficiently large to allow of an option being allowed in the choice of Science, additional subjects and industries, the difficulty will arise from time to time as to whether the same teacher

teacher is to be entrusted with the teaching of all branches of Science additional Subjects and industries or whether pupils should be compelled to take up one and the same Science additional Subject and industry

II Practical Instruction

(1) Up to the III Standard Kindergarten and Manual Training to be given

If the Kindergarten and Manual Training in the Hamidia Elementary Schools in the mofussil are to be anything more than mere names a much higher order of teachers is required, higher both in respect of general Education and specialist Training than is to be had at the present day

(2) The object of the Committee is that the Industrial Education imparted should be such as to enable the pupils to earn their living

It is of the highest importance that there should be a reasonable certainty of all the pupils earning a decent livelihood each according to his station of life. For this purpose, the rate of wages for each industry in a town the number of wage earners and the prospects of supply and demand of each and est. For some years to come should be ascertained with a fair degree of approximation before the teaching of such industries whether voluntary or compulsory can be taken in hand

(3) Group 'A' includes (a) Agriculture, (b) Gardening (c) dairying (d) Apiculture (e) Animal Production	The teaching of Agriculture in General Schools has been tried in Bengal & abandoned as being a failure. The result of grouping so many subjects together will be that none of these subjects will be taught satisfactorily with sufficient attention to the details of processes. One industry well learnt will repay better than ten imperfectly learnt. The same remark applies to many other groups such as C, F N & P
(4) Group 'B' Comprises Sericulture and Eri Silk Production	Experiments in Sericultural farming in Bengal have not been successful and the success of the Bangalore Silk Farm is also yet to be proved. Sericultural teaching in places where it has been started in Govt Schools as in Chamapatti and Coloseapet has suffered as much from the apathy of teachers and pupils as from the lack of funds for purchasing mulberry leaves or necessary tools and useful articles. The contingent amount sanctioned for the purpose being insufficient
(5) Group 'C'	Not likely to repay sufficiently for livelihood

(6) Group 'D' includes Carpentry and Black-Smithing	Two very different industries requiring altogether different sets of conditions
(7) Group 'E' Comprises Brass & Copper work and Bell metal Casting	With the great & increasing use of glass and enamelled iron ware in place of brass, copper and bell metal utensils and other articles such as lamps cups saucers plates, dishes etc This industry is likely to become less and less profitable as time goes on unless improved methods and improved patterns are adopted For this expert training is necessary The brass industry of Mogadu has been steadily deteriorating Several manufacturers having abandoned the calling and taken up petty trading by preference
(8) Group 'F'	Not likely to repay outlay, livelihood, any considerable no of pupils in a locality
(9) Group 'H' Weaving and Dyeing	Even the Weaving School of Dodballapura with its expenditure of about Rs 60 per pupil has not been able to set up many of its pupils independently working with improved methods None of its pupils has adopted the Fly Shuttle loom or shown better work in practice than the home

	home-educated artisans One of the weaver caste who has passed the KLS Exam pupil ~~who~~ was deputed from Dommasandra to learn Weaving in the Dodballapur Industrial School on a Scholarship of Rs 7/ per mensem and completed the Course of Study but afterwards expressed his willingness to enter Govt Service on Rs 10/- per mensem in any capacity rather than work in the profession
(10) Group '1' Tailoring and Dress making	The demand for this in mofussil places is very limited
(11) Group 'J' Shoe-making Cobbling + Tanning	Religious and Social objections will prevent the adoption of these industries by any but the lowest class of Panchamas in mofussil places, whatever the case may be in large cities -
(12) Group 'M' Tin-Smithing, and Wire-goods making	Costly machinery will be required for wire goods making and the demand for such goods is problematical
(13) Group 'N' Horn articles &c	It may be possible to make interesting curios out of some of these materials such as hookah bulbs, cups &c but the demand is very limited For production on a large scale costly machinery and improved methods taught

	by expert teachers are required
(14) Group 'O' Needle work and Embroidery	The above remark also apply to embroidery in this group. In the Chamupatna Mission Industrial School for women these occupations were tried and found to be not sufficiently paying
(15) Group 'P' Confectionery, Syrup making etc	Distilling essential oils is a very different industry from others and requires different conditions

III. Teachers

(1) Literary teachers to give Industrial Education	Such teaching is likely to be altogether unsatisfactory
(2) Teachers to be trained by deputations, vacation courses and study in Normal Schools	Such training is likely to be very insufficient
(3) Expert craftsmen to be employed occasionally to teach	If the indigenous industries are taught according to old methods only, they will not enable any large number of pupils to earn their livelihood under the present conditions of a steadily decreasing demand for their productions

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5 Conclusion - If it is deemed necessary to impart Industrial Education to pupils of Elementary Schools it would be better to open independent rural Industrial Schools manned by teachers instructed in improved methods in respect of each industry, The Supply of such teachers being insured by a permanent System of Scholarships or by The establishment of a Central Training School To mix up Industrial, Manual and Elementary Education taught by the Same masters in one and the Same Elementary School would lead to loss of efficiency in each of These branches A Village Elementary School teacher who will be equally Successful as an instructor in Literary, Manual and Industrial Subjects would be a miracle Such as we have no right to expect within the present generation

The great needs of the times appears to be, (1) The improvement of the existing Schools both general and Industrial So as to

them really efficient, (2) The starting of such new modern industries as are likely to meet a real demand in the market by private capitalists such industries being fostered, if necessary by State aid, (3) the ~~general~~ gradual multiplication of really efficient Industrial Schools teaching such new industries at suitable centres, (4) The establishment of a judicious inter-connection at various stages between the Literary Courses in General Schools and the Industrial and Technical Courses in Industrial Schools and Technical Colleges such as we find established in the educational system of Japan Without an increase in new and flourishing industries Industrial Education whether in the old or in the new methods would only glut the market with skilled industrial labour and create new difficulties If as is too well known in this country capital is shy of investment in industrial

Undertakings, it follows that Industrial Education has no right to be in advance and if it does go in advance it will be so much the worse for the labourers "Market first, Capital next and labour last" would appear to be a sound maxim for industrial progress Industrial education should follow and not precede the creation of ~~Industrial enterprises~~ industries based on a real demand for the commodities and vitalized by the free influx of Capital

H Damapper

Deputy Inspector Jubb.
Bangalore district

REPORT OF THE COMMITTEE ON PRACTICAL AND LITERARY INSTRUCTION IN ELEMENTARY SCHOOLS IN MYSORE

INTRODUCTION

Government in their Proceedings No 2640 8—Fdn 221 09 3 dated Bangalore 16th September 1910 were pleased to make the following order -

Government consider that practical instruction should be made part of the curricula of studies in Elementary Schools so that the pupils may obtain some instruction enabling them to turn to some practical walk of life to earn enough to live upon Such practical instruction should comprise elementary lessons in agriculture carpentry pottery wicker work or similar simple trades A Committee consisting of the following gentlemen is appointed to consider the subject —

Mr Shama Rao M A	President
Mr B Dasappa	Deputy Inspector of Schools
Mr M Ramaswamayya	Do
Mr S Rangacharlu	Retired Deputy Inspector of Schools
Mr V Subramanya Iyer	Head Master Tumkur High School
Mr C Krishna Rao	Head Master Bangalore High School
Mr K H Ramayya	General Secretary Vokkaligara Sangha
Mr H Sreenivasa Rao	Assistant Conservator of Forests

The Committee is requested to hold such enquiries as may be necessary to elicit the drawbacks of the present system of teaching in Elementary Schools and the measures for their remedy and draw up a scheme revising the present curricula of studies in these schools wherever it is necessary and providing practical instruction as referred to in para 1 and submit the same to Government within three months if possible through the Inspector General of Education

2 The Committee accordingly held four sittings First on the 24th October 1910 next from the 22nd to 24th December 1910 again from the 4th to the 9th October 1911 and lastly on the 29th and 30th December 1911 At the first meeting it was resolved that each member should submit to the Committee a note containing his views on the subject The notes of such members as responded to the resolution are found in Appendix A At the second sitting the notes were read and discussed at considerable length But before the third sitting came off the President Mr M Shama Rao was transferred to Tumkur as Deputy Commissioner At his suggestion Mr V Subramanya Iyer was appointed Secretary and deputed to tour in some of the districts of the State with a view to making further enquiries regarding *local* industrial and educational conditions His report forms Appendix B At the third session the Secretary s report was read and the entire subject was traversed in all its important bearings The present report is on the lines determined by the Committee at this meeting When the last sitting was held the draft which had been previously circulated was read and passed with the alterations adopted then Mr B Dasappa s note on the *Draft Report* forms Appendix C

3 The investigations made by the Committee chiefly turned upon a consideration of the following drawbacks in the existing Elementary Schools —

(*a*) The purely literary and theoretical character of the curricula which have failed to meet the requirements in life of the pupils of rural schools

(*b*) The somewhat antiquated methods of instruction the unsatisfactoriness of the present system of recruitment of teachers and the inadequacy of the facilities now existing for training them

(*c*) The unsuitability of some of the manuals and school books

4 With a view to remedying these defects and engrafting on the literary curricula as much of practical and elementary industrial training as would *ultimately* enable the pupils to turn to some practical walk of life the following recommendations are made by the Committee

5 *Courses of instruction* —All such vernacular schools as provide instruction up to any of the standards noted below, including the IV A, and the V A, which addition to the existing course is rendered necessary by the introduction of Industrial Training, are to be considered "Elementary

The Infant Standard I II III	Lower Elementary
IV IV A V V A	Higher Elementary

6 Standards IV A and V A should be opened only in schools in which provision can be made for Industrial Training

7 The Infant and the I Standards extending over two years may be completed, in the case of intelligent pupils and those that have had training at home in one year

The entire Elementary course will thus extend over five or six years in schools providing no industrial instruction and over seven or eight years in schools providing it

8 All such Anglo Vernacular schools as desire to train pupils for the Vernacular course, should provide a distinct Vernacular course, *parallel* to the English The former should consist of all the required Vernacular Standards After a pupil finishes the III Vernacular Standard, it should be open to him to elect either the Anglo Vernacular course or the vernacular In the former case, Industrial Training will not form part of the curriculum In the latter, unless pupils are specially exempted under the Departmental Rules framed in this behalf, Industrial Training should be compulsory

9 The IV and V Standards should not be opened in any school unless and until separate teachers are provided for them The IV A and V A Standards should have separate teachers when their strength exceeds a certain number to be fixed by the Education Department, with due regard to local circumstances and the needs of the school

10 In all Elementary Schools, *practical instruction* should be given along with literary But such practical instruction as is purely of an *Industrial* character should be given only in those schools that can command the requisite facilities and satisfy the conditions laid down in the paras relating to Industrial Instruction

11 *Literary instruction* — In the Infant I, II and III Vernacular Standards, the existing curriculum should be recast so as to include the following subjects —

Reading Recitation
Writing Spelling Composition (with elements of Grammar)
Arithmetic
Object lessons and nature study (with elements of Science)
Drawing and hand work (as in Table I)
Singing Games Drill and Physical Exercise
Stories (including Moral Stories)
Elementary Geography and History
Lessons in Health

12 In the IV, IV A, V and V A Standards the following revised curriculum should be adopted —

Subject	Number of hours per week
Religious and Moral Instruction	2½ hours
Mother tongue	7
Arithmetic	4
History and Geography	2
Science subjects	2
Additional subjects	2
Drawing	2
Industrial Training (three afternoon lessons of two hours each)	6
Music Drill and Physical Exercise	Time should be found after school hours

13 In the IV and V Standards of schools preparing candidates for the Lower Secondary Examination and not making industrial instruction a part of their curriculum provision should be made for instruction in Manual Training in addition to the subjects prescribed for the Lower Secondary Examination

14 In schools in which Industrial Training is given the literary courses of the IV and V Standards should be spread over four years covering the IV IV A V and V A Standards

15 The science subjects shall comprise—

1 Hygiene (including Elementary Physiology)
2 Elements of Natural Science
3 Elementary Physiography

The additional subjects shall comprise—

1 Book keeping (Indian and European system)
2 Domestic Science (including Cookery)
3 Ambulance (for boys)
4 Sick nursing and Sewing (for girls)

16 *Not more than one of the science and one of the additional subjects should be allowed to be taken up by a pupil at a time*

17 The details of the curricula should be drawn up by the Education Department The lines on which such details may be filled in are broadly indicated in Table II Inasmuch as a reform of the methods of instruction and of the direction of the teacher s work is more urgently needed than a revision of the curricula adequate provision should be made by the Inspector General of Education for having the curricula as recast worked according to *modern* methods of teaching

18 *Practical instruction*—Up to the III Standard that is in the Lower Elementary course practical instruction should be given by the employment of the Kindergarten and the Manual Training Methods on the lines indicated in Table I which is based on the Special Report on Manual Training by Mr H J Bhabha the late Inspector General of Education in Mysore

19 In all the standards above the III, that is in the Higher Elementary course practical instruction should be of an industrial character and given on the lines indicated below In those Vernacular Schools in which the Industrial Curriculum is not adopted (*vide* para 13) the Manual Training Course for the Higher Elementary Standards should be that prescribed by the Department and in the Special Report on Manual Training by Mr H J Bhabha

20 *Industrial instruction*—The Elementary Industrial Training proposed to be given in the Higher Elementary Standards should cover a course of four years which in the opinion of the Committee is the minimum required to enable one ultimately to earn a living For the important Industrial subjects the curriculum of four years given on pages 48 and 52 of the Mysore Education Rules Part II is recommended And for the rest the curricula should be drawn up by the Education Department in consultation with experts as necessity arises

21 Such pupils as have completed the lower Elementary course of study in any Vernacular School may if they so desire pursue only the Industrial course in any Higher Elementary or separate Industrial School In the case of such pupils the course may be shortened by a year

22 After finishing the Elementary Industrial course of four years prescribed here a pupil may proceed to Higher or Advanced Industrial course in the separate trade or Industrial Schools now existing or to be established in the future

23 The following are the industries which may be usefully taught each group being treated for educational purposes as one subject or industry —

Group A	(*a*) Agriculture (*b*) Gardening (*c*) Dairying (*d*) Apiculture (*e*) Animal production breeding and management of live stock
Group B	(*a*) Sericulture (*b*) Eri Silk production

Group C	(a) Rope making (b) String work (c) Mat and basket making (Out of leaves rushes fibres with green Semi carpus Anacardium) (d) Bamboo work (e) Rattan work (f) Coir rug making
Group D	(a) Carpentry (b) Blacksmithing
Group E	(a) Metal (brass and copper work) (b) Bell metal casting
Group F	(a) Pottery (b) Glass bangle making (c) Soapstone work
Group G	(a) Coarse cotton weaving (b) Rug making (c) Rough cumbli weaving
Group H	(a) Weaving finer counts (sadies etc) (b) Dyeing
Group I	(a) Tailoring (b) Ordinary dress making
Group J	(a) Shoe making and cobbling (b) Tanning
Group K	(a) Wood turning (b) Toys making
Group L	(a) Book binding
Group M	(a) Tin smithing (b) Wire goods making
Group N	(a) The making of horn articles (b) Cocoanut shell articles (c) Arecanut fibre articles (d) Brushes (e) Walking sticks
Group O	(a) Needle work (b) Embroidery
Group P	(a) Cookery (b) Syrup and pickle making (c) Confectionery (d) Distilling essential oils (e) Making farinaceous food stuffs

24 In the selection of any industry for purposes of training pupils in, not only local facilities, climatic and other conditions, but also the economic possibilities of success must be considered, as far as possible

For rural schools group A may be made compulsory

25 *Teachers* – Seeing that out of every six teachers of Elementary Schools in this Province, only one is a trained person, it is highly necessary that more facilities should be created for training literary teachers and that especially in modern methods of Practical Instruction

26 For Industrial Training, while it is indispensable that only trained teachers should be employed, it is the opinion of the Committee that no separate teachers are required to start with In the existing circumstances of the country it facilitates the introduction of our scheme to make a selection of such of the literary teachers as possess aptitude and enthusiasm and give them the requisite industrial training to take up the work

27 The Industrial Training for the teachers may be given by means of—

(1) Special vacation or holiday courses at select centres, by experts employed by Government or private agencies

(2) Deputation for suitable periods to (a) farms like the Hebbal, (b) gardens like the Lal Bagh, and (c) industrial schools like the one at Mysore

(3) A course of Industrial Training specially provided in the Normal Schools

28 Wherever it is possible, an expert craftsman may be employed for a short time, to teach not only the pupils but also one or more of the teachers of a school When the teachers are sufficiently advanced, the services of the experts may be dispensed with

29 *Manuals bulletins and text books*—To help teachers as well as pupils the Education Department should arrange to publish from time to time teachers manuals and bulletins prepared by experts on each subject literary or industrial Suitable text books for pupils have also to be provided and revised from time to time

30 *Demonstration and experimental institutions*—Though the question of separate industrial institutions is not a subject within the province of this Committee yet the maintenance of some central institutions for experimental work is considered absolutely necessary especially for the purpose of training teachers in the latest methods and processes of industry Such institutions would also serve for purposes of demonstration occasionally and the Committee cannot too strongly urge this point for the consideration of Government

31 *Bonuses for teachers of industries*—No regular pay is recommended for the teachers for the present Bonuses ranging from Rs 20 to Rs 50 may be awarded annually to the most successful teachers of industries

32 *Examinaton and inspection*—There should be held every year in convenient centres an examination of the industrial training given in schools by a Committee of three members who shall recommend to the Inspector General of Education such pupils as deserve pass certificates This Committee should also report upon the quality of work done by the teachers recommending the deserving ones for bonuses

33 The Committee should be appointed each year by the Local Examination Committee The Committee so appointed should visit each school if possible but when the number of such schools is large it should hold the examination at convenient centres which should be previously determined by the Inspector General

34 The rules for the conduct of the Examination should be framed by the Inspector General

35 *The Central School*—To bring the benefits of Industrial Training within the reach of even small schools the formation of Central Schools should be encouraged wherever several small village schools are situated sufficiently near one another The most central one should be allowed to have standards above the III Vernacular with the requisite provision for Industrial Training though the strength of the Central School itself may be poor

The grown up lads of all the surrounding villages may after passing the III Standard join the Central School either for further literary instruction or for Industrial Training

36 *Equipment*—To every school that teaches agriculture two acres of dry land and wherever possible half an acre of wet should be granted free The teachers should with the co operation of local ratyats and other leading men such as the members of the School Committee arrange for the cultivation of the land

37 Pupils should as a rule provide themselves with all the ordinary tools In the case of exceedingly poor pupils the Inspector General may make a grant for supplying them with tools but such tools are to be the property of the school

38 To meet the initial or recurring or contingent expenses and to provide the school with such implements and tools as the pupils may not be able to procure for themselves the Inspector General may after necessary enquiry make a grant

39 *Provision of funds*—For all expenses connected with the Industrial Training of pupils in Elementary Schools the Committee recommend that *for the first few years* a lump sum grant may be placed annually at the disposal of the Inspector General After gaining experience specific allotments may be made and additional funds given

40 *Allowances stipends and fees etc*—Such teachers as are deputed to other places for special industrial training should be paid in addition to their expenses of travelling an allowance of not less than half their monthly salary and not exceeding Rs 10 per mensem to meet the additional expenses incurred by them

41 To sons of artisans obliged to leave their homes solely to undergo industrial training a scholarship of Rs 6 a month may be granted for not more than four years for some years to come

42 No fees should be charged for industrial instruction

43 *Articles made and accounts* —Pupils may be allowed the option of purchas ng any of the articles made by them by paying the cost of the material

44 The articles made in the industrial schools should be disposed of in accordance with departmental rules for industrial schools

45 All the accounts of the industrial section of the school should be check ed by the Inspection Committee that visits the school annually

46 *General* —For the first few years the revised scheme herein proposed should be introduced only *tentatively* into a few select schools, where teachers are prepared to undertake the work and where the requisite scope and facilities exist

C KRISHNA RAO
K H RAMAIYA
M RAMASWAMAIYA
S RANGACHARLU
B DASAPPA
H SRINIVASA RAO
V SUBRAHMANYA IYER,
Secretary

Subject to my views expressed in the note of dissent already submitted to the Committee

B D
13 3 12

M SHAMA RAO,
Offg Deputy Commissioner, Tumkur District and President of the Practical Instruction Committee

TABLE I

Tabular statement showing practical activities from the Infant Class or Kindergarten to Standard III

	Infant Class or Kindergarten Age 5—6	Standard I Age 6—7	Standard II Age 7—8	Vernacular Standard III or Anglo Vernacular Standard I Age 8—9
Drawing	(1) Mass drawing with crayon of simple objects such as the sun the moon eggs etc, on wall black boards or free arm boards (2) Mass drawing with crayon of leaves of familiar plants (Three half hours)	(1) Free hand and free arm line drawing with crayon of easy and familiar objects from the objects themselves (2) Free hand line drawing with crayon of leaves of irregular shape in connection with the nature lessons (3) Illustrations of stories told or of stories in Reading Book (Three half hours)	(1) Free hand and free arm line drawing with pencil or crayon of familiar objects from flat examples (2) Drawing of bunches of leaves and fruits (Three half hours)	(1) Free hand drawing with pencil of familiar objects bunches of leaves fruits flowers etc from memory (2) Illustrations in connection with reading conversation lesson Geography and History (Two periods of 45 minutes each)
Clay modelling	Modelling of easy natural objects in connection with nature study lessons (Two half hours)	(1) Modelling of single leaves fruits pods etc in connection with nature study lessons (2) Modelling of pottery (Two half hours)	(1) Modelling of fruits vegetables stems branches bunches of leaves feathers of birds etc (2) Modelling of small articles in common use (Two periods of 45 minutes each)	(1) Modelling of flowers and bunches of flowers in connection with nature study lessons (2) Modelling of the class room school building hills villages rivers etc in connection with Geography (Two periods of 45 minutes each)
Brush work		(1) Blobbing line drawing and washing (2) Exercises in colour-mixing (3) Painting of easy natural objects such as broad leaves of simple structure (Two half hours)	(1) Painting of flowers bunches of leaves etc (2) Painting of simple designs (Two half hours)	Painting of natural objects
Stick and ring laying string laying seed placing	(1) Laying simple object forms (2) Laying letters of the alphabet	(1) Laying more difficult object forms (2) Laying simple designs		

TABLE I—*concld*

	Infant Class or Kindergarten Age 5—6	Standard I Age 6—7	Standard II Age 7—8	Vernacular Standard III or Anglo-Vernacular Standard I Age 8—9
Tablet laying	Laying of simple object forms with squares	(1) Laying of object forms with triangles circles etc (2) Laying of flooring designs		
Bead work	Stringing coloured beads	Stringing stated number of beads of different colours in correlation with number work	Making useful objects such as chains necklaces or representation of objects	
Fraying	(1) Drawing out a given number of threads from a piece of bunting (2) Making mats brushes etc of threads so drawn out			
Building with bricks	(1) Building representations of simple objects (2) Laying of forms of beauty gifts III and IV	(1) Construction of representation of objects huts buildings forts towers etc (2) Laying of designs gifts V V B and VI		
Interlacing slats	Making simple object forms such as gardens fence fans etc	Making more complex object forms Interlacing designs		
Spinning and weaving		(1) Washing carding dyeing wool (2) Cleaning cotton (3) Spinning cotton and wool	(1) Dyeing yarn and wool (2) Making a loom (3) Weaving plain cloth	(1) Making a shuttle heddle and warp stick (2) Weaving with coloured thread

Cane working and basketry Card work			(1) Weaving of bamboo chicks and mats (2) Rope and net weaving	(1) Weaving of bamboo baskets (2) Making of ornamental flower baskets of coloured rushes and grasses (3) Making rattan trays
Sand tray work	(1) Forming letters with a clean finger in clean sand (2) Illustrating land and sea sea coast hills mountains rivers table land and volcanoes	(1) Illustrating more Geographical terms (2) Plans of the school house school garden and surroundings	(1) Representative scenes of an Indian village of a tank and fields of pasture lands (2) Representation of caves forests etc	(1) Representative scenes of (*a*) pastoral life (*b*) agricultural life (2) Representation of a geographical area or province
Paper folding	Folding of simple forms of objects	(1) Folding of more difficult forms of objects (2) Folding of designs		
Paper cutting		Cutting of simple object forms free cutting as well as drawing and cutting to be practised		
Cardboard work				First year's course as given in Rich's book on paper sloyd (Two half hours)
School gardening	Gardening (Three periods of 15 minutes each)	Gardening (Two half hours)	Gardening (Two periods)	Gardening (Two periods)

TABLE I—*concld*

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School garden	Gardening (Three periods of 15 minutes each)	Gardening (Two half hours)	Gardening (Two periods)	Gardening (Two periods)

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APPENDIX A

NOTE BY MR M RAMASWAMAYYA ON THE PLACE OF MANUAL INSTRUCTION AND ELEMENTARY AGRICULTURE IN THE SCHOOL CURRICULUM

2s—

I THE PARAMOUNT NEED FOR THE INCLUSION OF MANUAL WORK AND ELEMENTARY AGRICULTURE IN THE ELEMENTARY SCHOOL CURRICULUM

1 *Physiological and psychological grounds* —The claim for the inclusion of Manual Instruction as an intrinsic part of the Elementary School curriculum is based on physiological and psycholo ical grounds

From 7 to 14 (or even 16) years of a e a certain suppleness knack or dexterous familiarity with the pencil or any implement may be acquired which dim inis es with succeedin years This principle is equally true of memory and quickness of perception (View of Mr Charles Godfrey Leland the American Educator)

Child study in recent years has revealed the scientific basis of Mr Godfrey s dictum and the educational value of all Hand Work The mind is a part of the bo ly and grows by bodily exercise precisely as any other part of the body and the a es from 7 to 14 or 16 are invaluable for buildin up the structure of the mind as of the trunk and the limbs If then we ne lect due exercise of the h ands as of the body generally we will not only deprive the ch ild of its birthright manual dexterity but are in dan er of even stuntin its intellectual development Thus the introduction of Manual Tr inin into Elementary Schools will not hamper but positively promote intellectual development (View of Mr J G Leg a B A Director of Education Liverpool)

The Board of Education in their recent memorandum on Manual Instruction in Public Elemen tary Schools also observe as follows —

The effectiveness of Industrial School both in our country and in the United States in forming character and giving a training for life has been often noticed It undoubte lly depends largely on the greater prominence given in th ese institutions to manual and practical work and we would associate ourselves with the opinion often expres ed that th e education hitherto given in the ordinary elen entary schools has not been in its fullest sense practical We believe that with the introduction of good hand work methods the literary side of the Education would al o become more real and better appreciated

2 *Main objects of manual work in elementary schools* —The main aim of manual work in an elementary school is–

(1) To develop certain centres of the child s brain
(2) To afford scope for acquiring manual dexterity at the a e when such lexterity must be acquired if it is to reach the pitch it should in maturer years
(3) To afford scope for self expression (*i e* for exercisin the child s constructive faculties)
(4) To make other school subjects more real to the child by connectin or correlatin hand work with them
(5) To keep the child in touch with its environment by iving it somethin to do which it recognizes as real and useful work (toys baskets mats etc)

It is not possible to have one uniform sch eme for all schools Neither can we accomplish all with one kind of material one tool or set of tools We need several sets of exercises in different materials each devised to carry out one main purpose in view In short we must give the utmost scope to freedom variety and initiative on the part of the teacher and the pupil

3 *Stages of instruction* —
(*a*) The infant sta e or class
(*b*) The junior stage or lower classes
(*c*) The senior stage or upper classes

The sta es of instruction in our Elementary Schools comprise the followin —
(*a*) The Infant class or sta e
(*b*) Lower classes or the Junior sta e
(*c*) Higher classes or the Senior stage

26

The infant class in our schools corresponds more or less to the infant or kinder arten schools in Europe and America This class should consist of at least 3 sections for children between 4 and 5 5 and 6 and 6 and 7 years of a e The list of varied occupations suitable for children of this age is given in the Appendix

At this early a e it is not possible to treat hand work as a separate subject or to ive special lessons to increase the child s manipulative skill The hand work like the drawin arises naturally from the child s thoughts and observations

The lower classes (Vernacular I II and III and A V I) enerally contain children between 7 and 10 or 11 years old The manual work here will mainly follow the lines of the infant class of course with modifications due to the greater strength and skill of the scholars also the greater variety of material used in th eir instruction There should be great latitude for independence and originality

on the part of the teacher Initiative on the part of the pupil should also be encouraged There should often be closer correlation with the rest of the curriculum (*Vide* Appendix for Manual Exercises suitable for the classes)

The higher classes include Vernacular IV and A V II Vernacular V and A V III and A V IV and V The ages of children vary from 10 or 11 to 13 or 14 years The course of instruction in hand work should be continuous from the lower to the higher classes

This is the period of transition when a stricter intellectual discipline must be exercised and the interests of after life should be taken into account At this stage it is desirable in the case of boys to give a distinctly industrial bent to their manual training

4 *Industrial or trade schools for boys aged 14 years and upwards* —The extension of the scheme of starting more industrial or trade schools in important centres of the State to meet the needs of boys coming from elementary and secondary schools furthers technical instruction The trade schools which will be open to boys of between 14 and 17 or more years of age are likely to prove a blessing to the country Students whose school career is not successful and those who have passed the Lower Secondary Examination besides many others will have an opportunity of learning a trade and earning their living At present there is an army of them who having no employment are idle The provision of technical education for them makes them economic and productive units of the State

5 *Feasibility of providing for manual work and elementary agriculture in the school programme Also distribution of time between the literary and practical sides of education* —The value of manual Instruction and elementary agriculture in the elementary school course can hardly be over estimated Now the question arises whether there is not already an overcrowding of subjects in the Elementary School programme and whether the inclusion of this practical work is not likely to prove prejudicial to the interests of the literary subjects From a perusal of the subjoined table showing the distribution of time between the literary and practical sides of education it will be manifest that by providing for hand work the period of time devoted to the ordinary subjects will not be materially lessened Only the boys of the English classes have an hour s extra work every day *i e* for five hours in school they will have six Six hours work is not to be considered taxing in view of the fact that drawing gardening and other manual occupations are exercises in which children take a delight The reduction in the portions of geography in which at present a little too much is expected is however a desirable change

Serial No	Subjects	Infant class	I	II	III A V I	IV A V II	V A V III	A V IV	A V V
	Hours per week	22	28	28	29+6	30+6	30+6	30+6	30+6
	Literary Subjects								
1	Moral and Religious Instruction	1	1	1	1	2	1½	1½	1½
2	(*a*) Language	3	4	4	4	4	4	4	4
	(*b*) Grammar			1	2	2	2	2	2
	(*c*) Writing		2	2					
	(*d*) Dictation	2	2	2	1	1	1	1	1
	(*e*) Composition and Story Telling	2	2	1	1	2	2	2	2
3	Arithmetic	3	4	4	4	4	4	4	4
4	History			2	2	2	2	2	2
5	Geography		2	2	2	2	2	2	2
6	English				6	6	7½	7½	7½
	Total	11	17	19	23	25	26	26	26
	Practical work								
1	Drawing	2	2	2	2	2	2	2	2
2	Manual occupations	5	5½	5†	5	5	4	4	4
3	Gardening								
4	Elementary Science and common things	2	2	2 ‡	5 §	4	4	4	4
5	Needlework Domestic Science and music (For girls)	To be taken for manual occupations from the II class upwards							
6	Physical exercises and games and songs for Infants	2	1½	After 5	Out of S II				
	Total	11	11	9	12	11	10	10	10
	Grand Total	22	28	28	35	36	36	36	36

Home work

† Gardening to go with Agriculture in II and Higher classes

‡ Practical Agriculture

§ Hygiene Agriculture (Elementary)

Place of nature study and elementary agriculture in the elementary school —With regard to this topic the Educational reformers in North America are divided in their opinions Some maintain that as soon as possible the indiscriminate study of the whole natural environment should give place to the definite study of elementary problems bearing on agriculture Others hold that elementary agriculture should be reserved for the secondary school and that the wider nature study should alone find a place in the elementary school curriculum There is no doubt that nature study if conducted by intelligent teachers who have nature love and nature knowledge will produce excellent results But in the hands of the unintelligent teacher who has to be reckoned with the teaching of nature study is apt to become vague and unmeaning

The case is however different in regard to agriculture It has the merit of definiteness and ensures exact scientific treatment It cultivates the active and creative instincts gives experience of failure and success and connects the school with practical life The early introduction of agricultural studies is therefore desirable especially in an agricultural country like Mysore where children in rural parts leave school very young In America the teaching of elementary agriculture is being encouraged in rural schools In our schools also the subject may be taught from the II class upwards At present theoretical lessons in agriculture are given to children in the III and higher classes of our schools The teaching should be made practical also Model courses of elementary agriculture should be drawn up and issued free to all rural schools in the State as has been done in America

6 *Considerations regulating the choice of manual occupations and some types of hand work specially suitable for elementary schools in the State* — Apart from its suitability to the circumstances of the children and the neighbourhood of the school an occupation ought to satisfy the following conditions —

(1) It must be educative and should specially stimulate independent effort and inventiveness Any work that provides a real training for hand and eye is in a true sense educative but the most valuable work of all is that which imparts a knowledge of form colour and the properties of the materials at the same time that it fosters manual dexterity
(2) It should admit of being dealt with in a progressive course
(3) It must be attractive to the children and afford a welcome relief from other studies
(4) It must not involve the use of needlessly expensive material
(5) It should avoid a large series of preparatory exercises apart from finished results and the finished article should be one that is attractive to a child Appendix B contains some types of hand work especially suitable for elementary boys schools in the State

7 *Practical arts for girls schools and curtailment of the curriculum* —The practical subjects for girls should include music needlework home economics and physical culture To provide for these items it is necessary to reduce the portions in the literary subjects Mysore History may be left out in the II class In all the classes the portions in Arithmetic History and Geography may be curtailed

8 *Are the pupils in a school to be taught one occupation or more than one?* —To my mind it seems to be desirable not to restrict the choice of the occupation of any year to one work alone Let me take one or two concrete cases to show how it is not possible to lay down any hard and fast rule on the point Clay modelling is a very useful occupation leading up to pottery in higher classes It is of great service in the teaching of especially Geography The teacher does not require any technical knowledge The children can pick it up easily And more than all the material used is comparatively inexpensive Paper work is a common occupation suitable for illustrating Arithmetic and Geometrical shapes Where grass or rush is available mat plaiting can easily be practised in addition to clay modelling and weaving of textile fabrics to the latter of which it is a preliminary course

9 *Approximate cost for the equipment of a school wishing to teach some specific occupations* — Appendix E gives the approximate cost of equipping a school for teaching cloth weaving rattan work and weaving of mats out of local grass or rush

10 *The consolidation of small rural schools into larger and more efficient ones* —The consolidation of schools means the uniting of two or more inefficient schools into a large central one for the purpose of securing both increased numbers and better educational opportunities In the United States and Canada the movement of consolidation is proceeding rapidly and has met with marked success After consolidation the enrolment and attendance have gone up Public interest in rural education has been awakened Besides consolidation has facilitated the employment of competent teachers for elementary agriculture and manual work In Mysore where there are many poorly attended inefficient rural schools for boys the experiment of consolidation may be tried with advantage at least in a few places within a distance of 2 or 3 miles A good building having a spacious compound may be put up by Government in a central place of course with material help from the people

11 *A manual room recommended in large schools at taluk stations for practical work* —It is most desirable to provide at a moderate cost a separate manual room for practical work in all large schools at taluk stations The room may be located in the school premises The use of zinc sheets will lessen the cost of the room and save the trouble of annual repairs

II THE TRAINING OF TEACHERS

1 *The crucial point in all educational reform* —The crucial point in all educational reform is the training of teachers No one can give good lessons in elementary agriculture manual work and home economics without special training Training should not only prepare teachers in the science and art of education but also awaken in them a keen interest in the actual life of the present day

2 *The undesirability of postponing the introduction of manual work etc for want of teachers* (b) *Systematic arrangements required for training* —There is no doubt that the number of trained

teachers is few But the lack of them should not be taken as a sufficient reason for postponing the introduction of the subject into the elementary school curriculum In view of its importance strenuous efforts should be made to train the present generation of teachers and also train up a new generation capable of successfully dealing with the problem as a whole

(c) *Special encouragement of hand work by making it one of the optional subjects for the local examinations* —A knowledge of hand work should form an element in the teaching of all future teachers Instruction in hand work may also be encouraged by permitting candidates for local examinations to take up manual work as an optional subject

3 *Facilities for training in hand work and agriculture* (a) *Existing facilities* —Among the existing facilities for training in hand work and practical agriculture may be mentioned the following —

(1) The three Government Normal Schools at Mysore Kolar and Shimoga At present the Mysore Normal School alone is well equipped for the work The other two institutions need to be equipped also if funds permit for the Upper Secondary course
(2) The winter course held annually for the last two years in the Government Normal School Mysore for imparting instruction to teachers in Kindergarten principles and manual work
(3) The Summer Vacation Classes at the nine manual training centres to teach teachers paper sloyd At these centres it may be conveniently arranged to give a course to them in light wood work also
(4) The twenty Industrial Schools in the Province At most of this a large number of teachers and pupils may receive lessons in wood work metal work drawing weaving dyeing card work reel and brush work etc
(5) The Government Agricultural Farm Mysore Here practical agriculture is now being taught to select students of the Normal School
(6) The Maharani's College the Wesleyan Mission Victoria Girls School Mysore the Wesleyan Mission Normal School for Girls Bangalore and the Wesleyan Mission Girls Schools at Hassan and Tumkur At these there is convenience for a Domestic Science course for lady teachers

(b) *Proposed facilities* —(1) First of all the equipment of Anglo Vernacular Schools at taluk headquarters for teaching manual work and practical agriculture and gardening

(2) The periodical training of rural teachers in well equipped and well conducted Anglo Vernacular Schools
(3) The formation in connection with large and important Anglo Vernacular Schools of well organized lending school libraries containing standard works both in English and Kannada on hand work gardening elementary science practical teaching and organisation etc The libraries are for the benefit of the teachers in the schools of the taluk
(4) The institution of more scholarships for technical education Deserving graduates and head and assistant masters of Anglo Vernacular Schools may be granted scholarships to take a course of instruction in a technical school in Bombay or elsewhere Teachers trained in special schools are likely to give an impetus to the progress of manual instruction in their schools
(5) The increase of the number of stipendiaries in the normal schools with a view to get more teachers trained than hitherto
(6) The opening of an Upper Secondary Department for girls in the Maharani's College Mysore to supply competent head mistresses required for important Middle Schools for girls
(7) The making of provision for a Domestic Science course for lady teachers in the service
(8) The establishment of an Agricultural College at Bangalore for giving a course of instruction in agriculture and gardening to teachers and others There is already a Government Agricultural Farm If feasible steps may be kindly taken to make it an adjunct of the proposed College
(9) The appointment of Agricultural Inspectors to superintend gardening and practical agriculture in the public schools of the State
(10) The arranging for the supervision of manual instruction in schools by sloyd supervisors also

4 *Whether specialists or ordinary teachers should take up the work of teaching manual instruction and practical agriculture* —It is most desirable that all manual and agricultural instructors should be ordinary certificated teachers many of whom have a considerable capacity for the work Hand work is to be regarded as an educational method rather than an isolated subject a trained teacher knowing educational methods and principles will be better able to teach the subject in a progressive and scientific manner than an untrained teacher or artisan in whose hands the teaching is likely to become mechanical A specialist with a sound knowledge of educational methods and principles will be a capital teacher However as a temporary measure artisans may be employed for the work

5 *The payment of allowance or increased salary to instructors in manual work and agriculture* —Manual instruction and elementary agriculture are important subjects which are to be taught by an enthusiastic certificated teacher It is but fair that some encouragement in the shape of allowance or increased pay should be offered to him for this work To regard it as a part of his regular routine will not make for efficient and satisfactory results

6 *Is the teaching of manual work and elementary agriculture to be compulsory or optional?* —There are many teachers who have no special interest in the work and are incapable of dealing with the subject There is no use of entrusting the work to them who will do it perfunctorily and will not help to make the experiment a success It is therefore not feasible to make it compulsory for the present It should be allowed to spread gradually as teachers become available But the value of

manual instruction and elementary agriculture in all schools should be recognised by Government Every facility should be afforded for training teachers in these subjects at the Normal and Industrial School all Manual Training centres special Girls Schools and the Agricultural College or Farm in the State as also at Technological and Agricultural Institution outside the Province Special summer and winter courses may also be held for the purpose The successful solution of the problem depends on the encouragement of Government as also on the staff of workers who are to grapple with all sides of the question with zeal confidence and courage

7 *Materials and text books* —Government have to arrange for the publication of suitable text books on the subject A fair material as far as possible locally available articles should be made use of in teaching an occupation In all places where Industrial School exist arrangements may be made with the managers for teaching wood work weaving and other occupations at a small cost to Government In other centres it is not possible to teach wood work or weaving unless Government bear the initial cost of tools implements and materials and also lend a helping hand to the schools now and then by way of supplying wood or yarn free of charge The teaching of cloth weaving in schools however is not likely to become an expensive affair since the sale of the articles made by children will bring back some capital

8 *Suitable working hours for small rural school* —The present working hours *viz* 7 to 10 in the morning 3 to 5 in the afternoon are no doubt convenient for all practical purposes during all the seasons of the year except when ryots are engaged in agricultural operations It is generally during the sowing reaping and harvesting seasons that farmers specially need their children's help to tend sheep or cattle At such times the holding of the school in the morning alone from 7 to 10 or 10 30 for periods varying from a fortnight to a month serves the purpose If this arrangement which should suit local conditions meets with approval all village schools will have full time work in summer when cultivators children have no special engagements To hold the school from 7 to 9 in the morning as proposed is all right But to continue the work from 4 to 6 in the afternoon appears to me not practicable The school children are not likely to return home for their work before 6 P M

M RAMASWAMAYYA

Approximate annual cost for the equipment of an ordinary weaving class of about 15 pupils

Items	Quantity	Rate	Amount	Remarks
		Rs a p	Rs a p	
Reeling machines	6	5 0 0	30 0 0	
Hathi machines	4	3 0 0	12 0 0	
Pirn winding machines	6	5 0 0	30 0 0	
Reels	200	0 1 0	12 8 0	
Hathi	25	0 4 0	6 4 0	
Pirns	500	1 0 0	5 0 0	
		per hundred		
Tape machines	3	2 0 0	6 0 0	
Sash machines	3	2 0 0	6 0 0	
Handkerchief machine —				
(1) Pit looms	2	3 0 0	6 0 0	
(2) Pit fly shuttles	2	6 0 0	12 0 0	
Carpet looms	2	5 0 0	10 0 0	
Healds and reeds		Lump sum	20 0 0	
Heald sticks draft needle etc		Do	5 0 0	
Total			160 0 0	
Recurring charges				
Repairs			10 0 0	
Extra healds etc			5 0 0	
For thread (*initial cost*)			100 0 0	
Total			125 0 0	
Grand Total			About 300 0 0	

30

Mats —For one loom

Talkad mat—	Rs	a	p
(1) For hariganr (reeds)	1	4	0
(2) For bamboos	0	4	0
(3) For country nails	0	4	0
(4) Cord for tying the loom	0	2	0
(5) Flax thread	0	6	0
(6) Teakwood plank	0	6	0
(7) For a knife etc	0	14	0
Total	3	8	0

Kadakola mat—

Materials same as for Talkad mat and (8) Colour and one more knife wanted which costs about a rupee more

Pattan—

List of Materials and the probable cost for a Rattan class of 12 boys

Initial charges—	Rs	a	p
A Twelve dealwood boxes ($1\frac{1}{2} \times 1\frac{1}{4} \times \frac{3}{4}$) to sit on	3	0	0
B Three wooden pieces for drawing strings	0	12	0
C Three dealwood boxes to fix B	0	12	0
D Screws for fixing B	0	2	0
E Country knives (thin) for 18 @ 2 as each	2	4	0
F Do (thick) for 2 @ 4 as	0	8	0
G Fine English made knives 2 @ Rs 1 8 0 each	3	0	0
H Country needles for 12 @ 2 as each	1	8	0
I Do (small) do @ 1 as 6 p each	1	2	0
J Hammer	0	12	0
K Foot rule (of two feet)	0	12	0
L A pair of pincers	2	0	0
M One oil stone	2	0	0
Total	18	8	0

Monthly recurring charges—			
(a) Rattan (quality) for 24 lb	8	0	0
(b) Wax for $\frac{1}{4}$ lb	0	4	0
(c) For repairing instruments	0	8	0
(d) For a six inch file	0	6	0
(e) For cocoanut oil etc	0	2	0
Total	9	4	0

T VENKATA RAO,
Head Master

LIST OF VARIED OCCUPATIONS SUITABLE FOR INFANT CLASSES

FOR CHILDREN BETWEEN FOUR AND FIVE YEARS OF AGE

Games with music
Games without music
Recitations—nursery rhymes etc
Picture lessons (learning to answer incomplete sentences as to what thay can see in a picture)
Sand modelling
Paper folding
Mosaic with coloured tablets
Drawing
Matching colours (picking out the same shades of wool from a heap of remnants)
Plaiting paper
Working patterns with needle and worsted
Threading beads in twos threes etc
Arranging shells in twos threes etc
Arranging pictures of number with cubes
Word building

FOR CHILDREN BETWEEN THE AGES OF FIVE AND SEVEN

Games with music
Games without music (guessing games etc taking messages)
Picture lessons

Object lessons
Story lessons
Recitations
Paper folding
Palm leaf work
Mosaic with coloured paper use of gum
Drawing
Plaiting paper
Building of object forms with pith and stick
Stick ring and string laying
Ruling simple geometrical forms
Measuring length Estimating length
Weighing Estimating weight
Setting a table (Carrying a cup of water without spilling it moving cups without breaking them)
Modelling in sand and clay
Basket work
Cutting out patterns and shapes with scissors
Word building
Number pictures with cubes beads seeds shells pebbles cowries marbles stick etc

Note —The inspecting officer may permit any teacher to select any other occupations if found necessary The above are mentioned as some of the occupation suitable for children of these ages It is not expected that all these occupations should find a place in the school programme

PRACTICAL ARTS FOR GIRLS

1 Needlework—plain sewing and embroidery knitting and tailoring
2 String work—making of silk or cotton strings bags purses etc
3 Weaving—yarn buttons rough tape cotton sash etc
4 Chumki work and lace work
5 Artificial flower making
6 Basket and rush work also straw work
7 Palm leaf work
8 Toy and doll making (out of kachu shell paper straw wax wood pith rattan, etc)
9 Wax work
10 Rangavalli drawing
11 Bead and wire work
12 Peacock feathers and mica are put to various uses
13 Embellishing and draping pictures
14 Stock raising and dairy farming
15 Household matters —
(1) Clothing food and habitation
(2) Care of the old and of children
(3) Nursing and prevention of infectious diseases
(4) Management and economy
(5) Ambulance work
(6) Sanitation
16 Music—
(1) (Vocal)—(*a*) Household songs
(*b*) Scientific music
(2) Instrumental

SOME TYPES OF HAND WORK SUITABLE FOR ELEMENTARY AND SECONDARY SCHOOLS

I (*a*) Sand modelling for infants and lower classes
(*b*) Clay or Plasticure modelling leading up to pottery For all classes

The educational value of modelling is undisputed It is specially helpful in the teaching of Geography Object Lessons etc Pupils who have gone through a course of clay modelling in the lower classes learn pottery easily in the higher classes Out of fine white clay available at Melkote and elsewhere chinaware may be made Tile making may be practised where clay needed for it is available as at Maddur etc

(*c*) Papiermache (made of boiling down newspapers and a material made of a mixture of flour and salt are used in geographical modelling at various schools in England

II Paper work —The various types of this work are —

(1) Free cutting and cutting with scissors to an outline This work may be done in infant class and also in higher classes up to II
(2) Paper folding This is a common infants occupation It is suitable for illustrating arithmetic and geography
(3) Paper plaiting For lower classes
(4) Paper modelling A combination of paper folding cutting and pasting and ruler drawing forming an introduction to cardboard modelling

(c) Paper twisting (practised in Japan) By means of this strong cords can be made Fit for higher classes from III

III Straw work for II and higher classe Out of straw hats plates trays small baskets shoes fans etc are made

IV Cardboard modelling Its aim is to aid the teaching of arithmetic and chiefly to afford a preparation for wood work Suitable for children of classes II and III

V Light wood wo (1) A simpler form of this work known as strip work may be done in Vernacular class II by children of 8 and 9 The work involves sawing nailing and gluing prepared strips but not joints of any kind Its object is to represent articles of furniture etc Wood work may be systematically taught from class III upwards

(2) Comb and button making (lightwood horn bone ivory shell pearl sandalwood etc)

VI Weaving There are many kinds among which are —

(1) (a) Raffia work A course of practical work in winding weaving plaiting and sewing this material Raffia is a kind of palm leaf

(b) Indian palm leaf work For lower and higher classes Out of this fans baskets water buckets mats toys ear rings tiffin boxes flower baskets boxes for saffron etc and culinary boxes are made In short it has been put to innumerable other uses in the southern parts of the Madras Presidency

(2) Bamboo work

(3) Reed rush and fragrant grass (ಲಾವಂಚ) work

(4) Cord work Coir and other fibre weaving and rug work

(5) Cloth and tape weaving (cotton wool and silk) also dyeing

(6) Jute hemp and flax work

VII Cane work

III String work consists of plaiting knitting and netting knotting and splicing and macrame work This occupation enables pupils to make such useful articles as cotton zones watch chains money purses book cases nets hammocks etc

IX Lacquer work toy work and making of musical strings or chords At a place like Channapatna these occupations are serviceable

X Sericulture for special parts of the Province where silk worm rearing i an ordinary occupation

XI Metal work and casting for places like Sravanabelagola Nagamangala and Halagur For higher classes

XII Tinning and soldering

XIII Tailoring for cities like Bangalore and Mysore It will be useful in villages also

XIV Book binding business correspondence and banking for Bangalore and Mysore

XV Agriculture or bee keeping for malnad parts especially

XVI Wax work

XVII Stock raising and dairy forming for rural parts This may form part of agricultural lessons

XVIII Tanning and leather work Also making of useful articles out of bone and horn Suitable for Mahomedan and Panchama children At present very little use is made of bone and horn especially in villages

XIX Ambulance work for children of classes IV and V in schools at district headquarters Also wherever instruction by a medical officer is available

XX Sandalwood carving and inlaid work for places like Sagar and Sorab Elementary carving is quite possible in higher classes IV and V

XXI Fret work for higher classes

XXII The process of extracting oils from varieties of oilseeds

XXIII Making of country glass and glass bangles

ANSWERS TO THE QUESTIONS FORMULATED IN THE FIRST MEETING OF THE MEMBERS FORMING THE COMMITTEE FOR CONSIDERING THE QUESTION OF AGRICULTURAL AND INDUSTRIAL EDUCATION IN ELEMENTARY SCHOOLS

ANSWERS TO SEVERAL QUESTIONS

II (*a*) In this question the two words *conveniently* and *usefully* require first attention The first word suggests that those industries for the promulgation of which facilities exist are to be selected the facilities being one or more of the following *viz* —

(1) Easy obtaining of raw materials required for the industries
(2) Those which can be easily taught
(3) Industries which boys are most willing to learn

2 Taking the first it is necessary in choosing an industry for any particular school to select only those which depend on the raw materials easily procurable in the place such as coir industry for schools in the Tiptur and Chiknayakanhalli Taluks mat making in place bordering on rivers where sedge grass is available carpentry for schools near the timber forests syrup making and distilling scents where fruits and flowers required are abundant wicker work where bamboos cane and twigs are easily procurable Dyeing where dye stuffs are abundant and so on

3 *Secondly* the industries are to be easily taught

4 *Thirdly* the boys must be willing and capable of learning the industry selected for teaching For example in places where high caste boys predominate they may not be willing to work with hides and learn tanning Similarly where only very young boys are found any industry may not be possibly taught

5 Religious scruples must be respected in regard to selection of industries and such of them or parts of them as are against religious ideas may be eliminated For example a high caste boy should not be asked to learn shoe making or the making of leather ropes (ತೆಂಗಿ) and none of them ought to be forced to cut up the carcass of a dog or cow to use the flesh as manure

6 The second word Usefully implies that the industrial articles turned out may be fit for home use or for the market *i e* they are to be useful from a commercial point of view In institutions where young boys are made to pick up the rudimentary knowledge of industries I think it cannot be made a commercially paying concern The industries are more educative than commercial But under the plea of mere education the commercial side ought never to be disregarded The final object of teaching industries being their commercial importance the commercial aspect of which should always be borne in mind and the articles produced should as far as possible be fit for home use and local consumption

7 So far as is known to me the following are the probable industries which can be taught in the elementary schools

IN THE GIRLS SCHOOL FOR GIRLS OF TEN AND ABOVE

(1) Syrup making jellies pickles and confectionery
(2) Knitting Hassan cap making
(3) Mosquito curtains purdas and embroidery
(4) Stitching coats and shirts etc
(5) Making fans
(6) Mats and mattresses
(7) Distilling essential oils from plants flowers etc
(8) Kitchen gardens
(9) Making vessels out of baskets (ಕೀರಿದ ಗುಡಿಗಳು)
(10) Making farinaceous food stuffs etc

35—

TO BOYS OF TWELVE YEARS AND ABOVE

(1) Bamboo and cane works
(2) Brass and copper works
(3) Buttons of cocoanut shell
(4) Candles
(5) Cigars and cigarettes
(6) Screens and checks
(7) Enamelled ware
(8) Essences scents and perfumes
(9) Rugs and other manufactures of fibres including ropes and strings
(10) Furniture
(11) Horn works such as combs knife handles and buttons etc
(12) Iron and steel works
(13) Lac work preparation of sealing wax and lacquered ware
(14) Weaving cloths sadees towels and bed sheets tape wicks and curtain cloths etc

(15) Picture frame making
(16) Gilding
(17) Porcelain pottery and tiles of different kinds and glazed ware
(18) Umbrella making
(19) Walking sticks
(20) Wire goods
(21) Dyeing yarn
(22) Making mats and mattresses
(23) Plantain fibre and grass (ನೊಚೆಹುಲ್ಲು) vessels and ropes
(24) Arecanut fibre carpets
(25) Soap making
(26) Making soap stone pots etc (ಮರಗೆ)
(27) Brush making
(28) Practical agriculture
(29) Tanning
(30) Making clothes water proof
(31) Tinker s work
(32) Kamblies and blanket works

8 II (*b*) The boys who assemble in the school for literary education are of different castes and grades of mental development and of different trades or professions They naturally inherit in some degree the knowledge of their parents professions and may widely differ in tastes and aptitude Therefore no single industry could be made common to all the boys of a school whereas considering the other side it seems to be quite impracticable to teach several industries in each school at one and the same time A medium course has therefore to be chosen Arrangements are to be made to teach two industries at a time one light and one middle class industry

9 II (*c*) Agriculture being the chief occupation of over 75 per cent of the people here it is needless to say that its improvement is of great importance Its development is all the more desirable when we consider that successful agriculture gives rise to a number of industries which directly or indirectly depend upon it Therefore a country agriculturally great cannot but be an industrial one also Silk cotton indigo and other dyes various fibres oilseeds sugar cane etc all give rise to numerous industrial occupations by which people make their living It is therefore of utmost importance to educate people in the higher modes of cultivation and create an interest in that art by proving that cultivation may be so improved as to secure greater profits than now The ideas of improved methods of cultivation are to be impressed on the young minds Agriculture being a profession not objected to by caste rules it has to be made compulsory in all the elementary schools It being a purely practical art the theoretical instruction given in the class room has to be practically demonstrated in the field Purely theoretical instruction now imparted has been fruitless and to be beneficial it is to be largely supplemented by practical instruction

10 With regard to other industries the list has to be a fairly large one to suit people of different tastes and means and it must be left to their option to select any of them *viz* one light industry for 3rd class boys and one middle class industry for 4th and 5th class students or for the special course in schools where the 3rd class is the highest as suggested further on Those selected by the students must be made compulsory

11 It is better if the industries chosen are such as may form the means of livelihood for the majority of the students

12 II(*d*) A real knowledge in any technical pursuit is the outcome generally of a long period of personal experience acquired by being born in a family practising that profession while so I am less inclined to think that any ordinary schoolmaster can pick up all the internal and minute details of any one profession during a short course of instruction which he undergoes unless he has enough zeal and thinking power to master the details The general tendency of a man in any particular walk of life when made to get experience of professions other than his own is to acquire a superficial knowledge of it so as to be able to pass the prescribed tests But real solid knowledge is something more than that required for passing examinations and it can be acquired only by birth right or by searching and thoughtful study Men of the latter class are very few among the elementary school masters though honorable exceptions may exist I am therefore of opinion that the short course of training which the schoolmasters undergo may not make them efficient teachers of industries of which they have no experience by birth It may not therefore be of much help to the success of the scheme Even if it is to be adopted it will take a long time to train the staff and a regular Normal School has to be established at considerable cost besides incurring an additional expenditure to keep the elementry school running during the teachers training period Delay and inefficiency may therefore be the result of trying to train the existing masters I think it therefore advisable to procure efficient men now following such professions to teach Most of such men may not have the literary education and may not be able to understand or teach the theoretical part of their profession But this is no great drawback as very little of theory can be imbibed by the young boys in elementary schools Persons employed as Foremen or Mestris in factories or intelligent men now living by those professions have to be secured on payment for teaching their special arts Those having literary qualifications among them may be preferred to others Even in large industrial concerns it is generally such men that do all work and understand the minor details better than those above them Therefore such men may be more useful for our purpose Where men of special aptitude are found among the schoolmasters they may also be sent to industrial centres or special schools for training

13 II (*e*) When the specialists impart instruction to the students the teacher must take notes and practically learn the craft so as to be able to pass a practical examination of higher standard

in that particular art The schoolmaster on passing such an examination may be allowed to teach that industry himself without the aid of the specialist Any teacher who so qualifies himself to teach may be given an allowance of a rupee or two for every industry he is capable of teaching By this system the temporary establishment of specialists may gradually be reduced

14 Those who teach industries whether special men or teachers may be paid a bonus of Rs 5 per every student taught by them if he stands the tests of an organized examining body or better still when he passes the Madras Technical Examinations in that industry

15 It may be necessary to establish an examining body for the technical subjects and to grant certificates for proficiency These certificates should be valued in the selection of teachers for the lower standard schools and in selections for employment in public service where such knowledge may be useful When sending applications for the Lower Secondary Examination it is desirable to make the production of this certificate compulsory as the vaccination etc certificates are at present Better than this would be to replace two of the now optional subjects of the Lower Secondary Examination *viz* Hygiene and any other optional subjects by industries as suggested further on

16 II (*f*) If the present curriculum has to be left unaltered the introduction of practical agriculture and industries is impossible for want of time The school curriculum as it is at present is burdened with subjects of which some can be more usefully replaced by industrial ones Even among the necessary subjects portions of some can be curtailed and the number of hours allotted to others has to be modified if practical instruction in the technical subjects has to be introduced How it can be done is described under question (H)

17 II (*j*) In some of the institutions among the elementary schools even the fifth or Lower Secondary class is established while in many the literary education ends with the highest upper primary or 3rd class Taking that a boy enters the infant class in the 6th year and that he secures yearly promotions he will be in the 3rd class in the 9th year and in the Lower Secondary in the 11th at the earliest It is difficult to teach even light industries to boys below 10 as they would not be fit for grasping the methods taught and as they are wanting in application at that age For this consideration teaching of industries in school where education ends with the 3rd class does not appear to be feasible But in practice boys in each class are on an average older by at least two years as compared to the official age assigned to them above Therefore boys in the 3rd class are about 11 and those in the 5th about 13 Regular industrial and agricultural education may for this reason commence with the 3rd class

18 Under this scheme the boy will have only one year of industrial course in schools where education ends with the 3rd class while those schools having the Lower Secondary class have three full years course In order to make the standard of industrial and agricultural education in both the kinds of schools equal it is suggested to enforce a special training of one year in agriculture and industries in the former class of schools immediately after the 3rd class course is over This whole time teaching of industries and agriculture for one year will more than balance the teaching of those subjects for two years in the Lower Secondary Schools

19 Agriculture has been suggested to be a compulsory subject in the every school A practical working scheme for this art is of primary importance The following is the scheme I propose for a village school consisting of about 30 boys The teaching of agriculture should be both theoretical and practical Theoretical portion should be taught by the teacher in the class room and its practical application demostrated in the field There are three kinds of soils from which all our agricultural produce is obtained *viz* dry wet and garden For practical demonstration therefore every school ought to possess a small extent of all the three kinds of lands say an acre of dry 10 guntas of wet and 10 guntas of garden Very often where there is a well for irrigation in or near the dry land allotted a part of that land may be converted into garden land otherwise the garden cultivation has to be transferred to a part of the wet land The lands have to be selected after due consideration of conveniences for irrigation the quality of the land and its proximity to the school etc If convenient Government waste is available it is well and good if not the required land has to be acquired or rented from some one possessing it The Deputy Commissioner Chitaldrug District was kind enough to inform me that this question of land for schools was moved in the Dasara Assembly and that land was promised

20 After acquiring the land the question of its treatment and protection crops up The so called school committees now appointed are only nominally existing The members have to be stirred up or changed so as to make this committee a really responsible body They have to select an interested man to cultivate and protect the crops in the school farm with his own labour and implements etc unless the school supplies him with different implements seeds and manures In the latter case he shall use those in place of his own The cultivator's duty must be to carry on all operations as the school authority prescribes and fence and guard the crops The schoolmaster must keep a yearly register of all those operations carried out with dates The register will be in two parts one for experimental and the other for sample plots and will among other things contain details of area under each crop manure used cultural operations irrigation resorted to quantity sown the season of sowing the condition of the crop at different periods the meteorological conditions that prevailed in the interval and the season harvested etc all with dates and details When the crop is harvested the cultivator may be given away ½ or ¼ of it according to the help rendered by the school as remuneration for his labours and the remaining ½ or ¾ kept for school use The cultivator shall allow the schoolboys freely to partake of the several operations in which he is engaged and put them in the way so as to enable them to acquire a practical knowledge of such operations

21 Suppose in a school of 30 boys there are 10 boys about 10 or 11 years of age and the rest below 10 Then every elderly boy with two younger ones make a working party and they will do all the work allotted to them jointly The elder boy will be the real worker while the other two will work with him as best as they can as his assistants

37

22 The school farm shall consist of three kinds of land dry wet and garden and each class of land will again be divided into two categories *viz* (1) experimental plots and (2) sample plots In dry lands cereals pulses and industrial crops requiring no irrigation shall be raised in the wet lands paddy of various kinds and in the garden portion vegetable and industrial crops thriving under periodical irrigation shall be attempted All the sample plots shall be worked and managed by the cultivator of the land while the experimental plots shall be worked solely by the hard labour of the students The experimental plots shall not be more than 5 to 10 square yards for each working unit of students and they will be located on one side so as to allow of an inner fence which the students have themselves to put up for safeguarding the crops The sample plots will be half a chain wide and one to two chains long so as to allow of easy ploughing Both kinds of plots shall be marked and numbered by planting small stones between every two The situation of the plots may be seen from the following sketch

23 After the division of plots comes the question of crops The following will be the probable crops to be raised in the several plots of each category of land say one kind in each plot

DRY LANDS

I Cereals

(1) Ragi of various kind
(2) Cholum do
(3) Millet do
(4) Wheat do

II Pulses used as food

(1) Cow gram of various kinds
(2) Dhall do
(3) Horse gram do
(4) Bengal gram do
(5) Black gram do
(6) Green gram do
(7) Karamani do
(8) Other pulses

III Industrial crops

(1) Cotton of various kinds
(2) Oilseeds do
(3) Fibres do
(4) Dye yielding plants
(5) Fodder crops etc

WET LAND

I Hundreds of kinds of paddy each differing from the other in form size and color of grain flouring value the kind of soil and cultivation required the season of cultivation and above all the period which it takes to mature etc

GARDEN LAND

I Vegetable used in cooking

II Industrial crops

(1) Dye yielding crops
(2) Sugarcane of various kind
(3) Starch yielding crops of various kinds
(4) Fibre yielding crops of various kinds
(5) Crops yielding condiments spices etc
(6) Scent yielding plants and flowers
(7) Those yielding medicinal drugs
(8) Mulberry of various kinds
(9) Edible fruits
(10) Betel leaf etc

The kinds of plants and varieties under each head are too numerous to find place in a discussion like this and their enumeration is unnecessary at present It is not possible or desirable to cultivate every kind of crop simultaneously one or two kinds from every class has to be selected for cultivation in each year and one plot put under it

24 Having so far described the preliminaries it now remains to describe the method of cultivation wherein lies the importance of the object to be fulfilled The process of cultivation naturally divides itself into two *viz* (1) processes in the experimental stage of which the superiority or inferiority has yet to be determined by examination and (2) the methods approved to be good by scientific experts but not adopted in ordinary cultivation by our ryots through ignorance carelessness or want of means and which it is now necessary to impress the cultivator with The former kind of cultivation we introduce into the experimental plots In this cultivation the out turn is of no consequence but only the value of the experiment or the experience gained is wanted The latter kind of cultivation will be confined to the sample plots Here the out turn and results obtained have to be really satisfactory and instructive to the boys and to the neighbouring cultivators Thus when the suggestions sketched out are really followed the school farm will not only serve as a place of practical instruction for schoolboys and agriculturists in general but it will serve as an experimental station also at a moderate cost

25 Below will be found some of the items of cultivation for testing in the experimental and sample plots and as we progress further the list will be capable of an unlimited expansion

ABOUT THE MECHANICAL CONSTITUENTS OF SOILS

To be tried in the sample plots

I Sand clay and organic matter are the chief mechanical constituents of all soils and they are to exist in a fixed proportion to make the soil rich Therefore the mechanical composition of soils is a great factor in influencing the out turn of crop Different crops delight in different proportions of these It is very difficult to find these existing in the required proportion in all soils Therefore a mechanical analysis of the soil should be made and the different constituents replaced before sowing any crop Potato beetroot groundnut and all other crops of which the parts used develop underground delight in loose soils in which sand predominates An equal proportion of sand and clay and about 5 per cent of organic matter is required for cereal crops and so on When the

To be tried in experimental plots

I The truth of the assertion described in No 1 sample plot will be more clearly demonstrated by sowing the same crop in the experimental plot in which the constituent ingredients are disproportionate value of cultivation mentioned in sample plot No 4

crop to be raised is known a proper proportion should be secured before proceeding with the cultivation Thou l tl e raiyats kno v somethin of this by experience it is rarely found applied in practice The proper proportion helps to increase the out turn

ABOUT DEEP PLOUGHING

II Tl e deeper the soil is moved tl e better does tl e crop resist drou ht Deep plou hin all at once is bad Tl erefore plou l in to the usual depth and tl en stirrin the subsoil in tl e furro s to a depth of 4 is prescrib e l This is no here done l y the raiyats This l as to l e introduced into a plot and tl e advanta es lemonstrated

II A sl allow plou l ed plot may be simultaneou l y sown with tl e same crop as in No 2 sample plot a l tl e re ults lemonstrated

ABOUT THE SEASON OF PLOUGHING

III Car ploughed fiel l ive hi her returns and the crops on tl em resist drou l t much better th n tl ose plou l ed in early monsoon ju t before sowin and yet no cu plou l in is ever attempted in the maidan district O e plot mu t be car ploughed and sown and the results shown to students

III An experimental plot should be plou hed in early monsoon and sown simultaneou ly with the san e crop mentione l in the sample plot No 3 and the results compared with it

ABOUT MANURES

IV Bone meal mixed with ordinary compost and appl ed to cereal crops has the property of raisin the out turn year after ye r until it nearly doubles itself and yet it is nowhere thou ht of by the raiyats Thousands of tons of valuable bones are yearly lost to the raiyats and they go to enrich the Coffee Planters This meal must be applied to a plot and the value of it demonstrated

IV An experimental plot cultivated with a proportionate quantity of or linary compost manure without bone meal will illustrate the v lue of cultivation mentioned in sample plot No 4

ABOUT GREEN MANURING

V When leguminous crops such as horse gram and sun hemp are gro vn and plou hed in as manure the soil yields l etter results than w l en mere leaves of mixed kin ls are used as manure One paddy plot may be put under it and the value demonstrated

V One experimental plot may be applied a proportionate quantity of purely leaves of other kin ds and the result contrasted with that of sample plot No 5

ABOUT MINERAL MANURES

VI Saltpetre mixed with compost manure an l applied to potato crop will enhance the out turn an l no raiyat knows this an l more tires thi A garden plot may be put under it and the value of the manure demonstrated

VI An experimental plot may be put under potato usin compost manure (without the nitrate) an l the results contrasted with that of sample plot No 6

ABOUT ANNUAL MANURES

VII Fle h and bloo l lar ely enhance the out turn of crops and fruit plants Althou h it i so valuable thousands of dead cattle are thrown away in the open around villages makin the places insanitary and none turns the carcass to any advanta e A fe v fruit trees and crops mav be applied this manure to show the results

VII Some fruit trees may be tried with otl er manure to contrast the results with those in sample plot No 7

96 In tance of this kind need not be multiplied here I would like to add that various other n etho l known to be best by scientific agriculturists and which are not practised by our cultivators may be introduced into the sample plots for demonstration purposes of educational value

97 Ascertaining at first what drops are fit for what soils timely plou hin and sowin proper manurin selection of good seed and timely carrying on of all subsequent operations will lar ely contri l ute to successful a riculture Therefore in the cultivation of sample plots all the e must receive prompt attention

98 Besides the cultivation of experimental plots as described above instituted to contrast with the results achieved in the sample plots other methods of *purely experimental character* may be introduced into them to gain experience in regar l to doubtful a ricultural matters *viz* —

(1) Testin the manurial value of various kinds of wild plants by usin them both as reen manure and in the compost form
) Trying to grow paddy under the American system of cultivation with periodical watering instead of flooding constantly
(3) Transplanting and sowing broadcast
(4) Testin the value of different oil cakes and mineral manures to different crops and so on

Each elderly student should maintain a journal of all operations carried out in the farm with dates details cost etc

29 All stores tools and plant as well as seeds and special manure must be supplied at Government cost for which one quarter of the value of the out turn from the lands may be secured to Government The school committee must be responsible for rendering all reasonable help in ordinary matters The approximate expenditure on school farms will be as follows —

I Annual or recurring expenditure

		Rs	a	p
(1)	Assessment of 1 acre of dry land at Re 1 8 0 per acre	1	8	0
(2)	Do ¼ acre wet at Rs 6 per acre	1	8	0
(3)	Do ¼ acre garden land at Rs 4 per acre	1	0	0
(4)	Tools and implements seeds manures Rs 10 to Rs 20 average	15	0	0
		19	0	0

II Capital expenditure

(1)	A small circular 4½ feet diameter well revetted with pot rings in places where no permanent wells or irrigation sources exist and where sufficient water could be tapped within 25 to 30 feet approximate cost	35	0	0
(2)	A small lapile bucket with rope and arrangements for lifting water	10	0	0
(3)	A zinc sheet shed 10 feet square with mud walls for keeping stores and seeds	25	0	0
		70	0	0

III Income

Deducting about 10 square yards for each of the ten groups of students for experimental plots in every kind of land there will be left 36 guntas of dry 8 guntas of wet and about 8 guntas of garden after leaving a margin for fence The income will be approximately ¼ palla of paddy (taking ¼ share of the produce)	3	0	0
Hundred and eighty seers of ragi (*i e* ¼ of the produce at about Rs 7 per palla	10	0	0
One fourth value of garden crop	6	0	0
	19	0	0

The income may be more in good years and smaller in bad years

30 *General* —For the successful teaching of agriculture it is quite necessary that we should have intelligent men as teachers in the schools *If the schools have no qualified and interested men the whole scheme dwindles into nothing* It is therefore necessary that each schoolmaster must be trained in the agricultural science and the inspecting staff Assistant and Deputy Inspectors should also have good knowledge of agriculture For these educated men it will not take more than a few months to pick up the subject While inspecting the schools they have to take time and examine the students in agriculture and industries also

31 A short course of agricultural training given to village schoolmasters who are ignorant of scientific education may not enable them to think out and plan the nature of experiments to be instituted and sample cultivation to be followed A man of scientific training and experience should therefore prepare or approve in each year the plan of work sketched out for the cultivation of experimental and sample plots in the next year The plan should be ready for adoption before the south west monsoon commences The rough plan may be prepared by the schoolmaster in consultation with the school committee and submit for approval in the harvest season of the previous year

32 The question of introducing the teaching of agriculture and industries into all schools simultaneously is a very difficult one to solve It is a question of finance staff and the willingness of people to take to learning the industries It may at the start be confined as an experiment to larger schools where average daily attendance is not less than 30 and among them to places where people show special desire to learn and develop industries As students and teachers get trained in the first taught institutions it will be easier to extend the scheme gradually to other schools by replacing retiring teachers by trained men In the meanwhile there will be time to study the working of the scheme in the first introduced institutions and develop it so as to suit further requirements In seasons when agricultural operations are at a standstill the student may be taken to the nearest gardens and fields or to cane milling places and threshing floors and made to partake of operations going on there

33 *Industries* —In the elementary schools it may be possible to teach only the light and middle class industries The schoolboys being children of people of various grades of the society a light profession such as rope making or wicker work may suit the requirements of some while others may dislike them and prefer the middle class ones Both these are to be taught the light ones in the 3rd class and the higher ones in the 4th and 5th classes or as a special course as already suggested

34 A practical scheme for teaching every industry enumerated under question 4 is not possible to draw up unless one has a practical knowledge of every one of these though it may not be very difficult to prepare a scheme with some experience and study A practical scheme for any of them

A.-V.—III CLASS.

DAYS	11 TO 11 50	11-50 TO 12-40	12 40 TO 1 30	1-30 TO 2-30	2 30 TO 3 20	3 20 TO 3-45	3 45 TO 5
Monday ..	English Reader	Arithmetic	Kannada Reader	.	Kannada Gram mar	Writing English	Manual work
Tuesday	Translation into English.	English Reader	English Grammar	.	History ..	Do ..	Do
Wednesday	English Reader	Arithmetic	Kannada Reader		English Dictation	Do .	Do
Thursday	Translation into English.	English Gram mar.	Kannada Grammar.		Arithmetic ...	Do ...	Do
Friday	English Reader	Arithmetic	Kannada Reader		Geography ..	Do ..	Do
Saturday	Translation into English.	English Reader	Arithmetic		History .	English Dictation.	Geography.

KANNADA III, IV AND V CLASSES.

DAYS	7 TO 8	8 TO 9	9 TO 10	3 TO 3 30	3 30 TO 5
Monday .	Kannada Reader ...	Arithmetic	History .	Grammar	Manual work.
Tuesday	Do	Do .	Manuscript	. Composition	Do
Wednesday .	Do	Do	History	Dictation ..	Do
Thursday ..	Do	Agriculture, Mensuration, or Sanskrit.	Geography and Map Drawing	Grammar .	Do
Friday .	Do	. Hygiene	History	Composition ..	Do
Saturday ..	Do	. Agriculture, Mensuration, or Sanskrit.	Geography and Map Drawing.	Dictation ..	Do

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NOTE BY MR. C. KRISHNA RAO ON RESOLUTION 2 OF THE FIRST MEETING OF THE INDUSTRIAL INSTRUCTION COMMITTEE, HELD IN BANGALORE ON THE 24TH OCTOBER 1910.

PRACTICAL INSTRUCTION IN ELEMENTARY SCHOOLS.

An attempt was made three years ago to place the training of young pupils in our Elementary Schools on a satisfactory basis. The services of Miss Latter, a Kindergarten Specialist, were engaged and a training class was opened in Bangalore with about forty teachers. All went well for a time and excellent work was being done, but unfortunately Miss Latter's sad and sudden death left her work incomplete. The work was, however, continued by others and the trained teachers ultimately returned to their schools to practise the methods they had learnt. It is to be regretted, however, that in the arrangement made no account was taken of the subordinate inspecting officers whose duty it is to test the work done and to guide the teachers. This defect calls for an early remedy. Unless sustained efforts are made not only to introduce up-to-date methods of teaching the young into schools in which they are little known but also to prevent their degeneration in schools into which they have been already introduced little good can be hoped for from the efforts that have already been made.

The most beneficial results are claimed for kindergarten methods of instruction in the infant stage and for manual training in the later stages of a child's early education. In the hands of a skilful teacher modelling, drawing, paper folding, paper cutting, and cardboard work with gardening and nature study afford unlimited scope for the development of a child's mental faculties. The following are some of the opinions which support this view:—

"The troublesome search for arguments is now over, the scientific basis of manual instruction is now accepted. We have a formula to hand which makes it plain to the meanest capacity how by the introduction of manual training into schools we do not hamper, but positively promote intellectual development."

(The Teaching of Handicraft in Elementary Schools—by J. G. Legge, B.A., Director of Education, Liverpool.)

(2) "And yet when we are called upon to recognise the importance of manual training in education, in England at any rate, there is widespread scepticism and hesitation. The claim made on behalf of manual training for young boys is that it is a profoundly natural, wholesome and successful method of improving the brain power, in other words, the mental processes. It is to the discredit of educators in this country that that claim should still be disputed" (By Rev. the Hon. Lyttelton, M.A., B.D., Head Master of Eton.)

"Manual training is not Industrial Education but an Element of it . . . so far as it goes it is industrial training." (Superintendent of Manual Training, Massachusetts.)

"Language, mathematics, science, history and art must ever stand first in the elementary schools. But these may be handled in such a manner that by means of them the sevenfold ability which constitutes industrial intelligence will be developed from grade to grade." (From an address delivered before the New York State Teachers' Association, Columbia University, 29th December 1909.)

The sevenfold ability referred to in the above paragraph is described as follows:—

1 Ability to grasp a situation; to see what is to be done.
2 Ability to interpret directions, spoken, written, and drawn.
3 Ability to foresee what will be required, and to plan accordingly.
4 Ability to co-operate intelligently with others.
5 Ability to do thoroughly well whatever is undertaken.
6 Ability to estimate values justly.
7 Ability to secure from work the highest satisfaction of success.

different arts has been in most cases a gift by the father to the son and such knowledge though often valuable is found free of the admixture of western improvements based on science

42 At present there are a few here and there who possess very valuable information in certain matters Their knowledge rightly understood and committed to writing will be very valuable to the generality of people and even to science but such men are unknown and unheard of for want of education and advertising tendencies which is naturally wanting among our people except in cases prompted by the polish of western education Very often knowledge is a thorough secret and is not revealed to others It dies with the man in many cases This has been the bane of all progress

43 I would therefore suggest that a thorough agricultural and industrial survey of the State being made by interested experts who have a research turn of mind The survey party should travel all over several times investigate and record all about crops and industries and after threshing out each subject supplement the knowledge so gained with all that is useful in the western books on the respective subjects and publish the information so collected in the form of bulletins to be sold cheap Several bulletins relating to one subject bound together will give us the manuals required This a tedious work which will take two or three years to finish but bulletins may be made to appear one after another after six months or so

44 Without this procedure publishing mere translations or extracts from the western agricultural books without the practical descriptions relating to our crops which differ vastly from those of western countries will not be of much practical value though they may be useful for imparting general theoretical instruction What we want is to study all our crops from the standpoint of western knowledge correct mistakes and introduce improvements where necessary For this reason so far as agriculture is concerned manuals must be got up after a sound knowledge of the practical cultivation now obtaining Western books which treat of special crops such as potato cotton sugar cane etc and books on industries would be very useful in getting up bulletins An industrial and agricultural survey is therefore necessary

45 II (g) T[illegible] [illegible]l be from 7 30 to 10 A M and again from 3 to 5

H SRINIVASA RAO

Assistant Conservator of Forests

NOTE BY MR S RANGACHARLU AS REQUIRED BY RESOLUTION No 2 OF THE MEETING OF THE INDUSTRIAL INSTRUCTION COMMITTEE HELD IN BANGALORE ON THE 24TH OCTOBER 1910

According to the departmental curricula the highest stage of elementary instruction is reached in the Vernacular V or in the Anglo Vernacular III class the ages of the boys being generally about 12 in the taluk and district headquarters and in the large villages near about them In the Elementary Schools of remote villages the ages may be taken to be generally about 15 or 16

2 The proper age of boys to begin to learn a trade and handle tools appears to be about 12 and at all events not below 10 So far as the industrial instruction is concerned the remote villages may be left out of account for the present The boys of the other schools can therefore receive along with the ordinary school subjects practical instruction in some trade only for 2 or 3 years at most before they pass from the Elementary Schools They will no doubt have made some progress in technical instruction in these Elementary Schools but a further course of practical training for 4 or 5 years appears to be necessary before they can acquire sufficient skill and dexterity to enable them to earn a livelihood by the particular trades which they have been taught in the Elementary Schools

3 *We must therefore have some special technical institutions for different trades with proper* equipments and staff of specialists to which the boys can resort to finish their further industrial course Such institutions are necessary also to train up the trade teachers for the ordinary Elementary Schools as well as for the lower special technical schools which might be opened in course of time

4 In the Elementary Schools there are no masters who are skilled in any particular trade and who can teach their trade to the boys Such masters have to be sought among the artisan classes or the services of men trained in the technical schools elsewhere have to be secured The latter class of teachers would of course be better in every respect If teachers are selected from amongst the existing staff and are trained to teach industries they should be given a special allowance in the same way as the sloyd masters are given at present

Resolution 2 Questions D and L

5 Trade manuals for the guidance of teachers and the necessary text books have also to be written by experts or translated by scholars into Kannada from foreign languages The materials to be worked upon should be supplied at the cost of Government

Question C

The existing accommodation of the Elementary Schools is in most cases insufficient even for their present purposes So it would not be possible for the trade classes to go on unless additional accommodation of some sort were put up or attached to the buildings of these schools This extra accommodation is necessary also to keep safe the raw materials and things to be made of them

6 When a large number of extensive workshops and factories for different industries spring up and renumerative work high or low is available everywhere boys may of themselves flock to the trade classes of any instruction and stick on under any conditions This is however a dream to be realized in the far future At present the trades are not very attractive to our boys

7 The condition of our handicraftsmen in the towns and villages is not an enviable one Most of them are extremely poor while others eke out their livelihood by having recourse to a precarious

ort of a riculture Such a pli ht of the expert trade men cannot be a temptin prospect to any candidates foi proficiency in the tra le

8 Tl e loys of the a ricultur t and arti an families may not care to l e technical in tiuction in the Elementary Schools at tl e co t of the l terary unless the former instructioi is decidedly superioi to what is available to them in tl ei own l omes a l tl e other boys m ty avoid tl e same throu h the old prejudice a ainst manual labour oi other vise Some sl ecial inducements may therefore have to be held for re ul ir itten l ance and hearty work in tl e tra le cl s es at a v rate foi some years to come Fe r of lismi al from school n i l t le an inducement in tl e case of any well appreciated Elementary Sel ools But mall merit sel olarshi s of from a few annas to a rupee or two or the dist ibution of the proceed of the sale of manufactured oo ls oi a part of them vould le a better oi an additional in lucement

9 Tr ide instruction in tl e Element ry Schools need not be confine l to the boys of the artisan clas es Tl e e boys are very fe v and not n ore tl an 2 oi 3 in a school Lven tl ese few belon often to different crafts so tl at each woul l re ju e tl e emi lo y ent of a separate teacher foi himself With all the accumul te l hered ty some of them mav be born stupi l and bi l v orkmen By exclu sive attent on to them tl e re ult of the ur lertakin mi ht not be a le quate to the efforts made and the expenditure incurre l vl ile the really t lente l an on tl e otl er boy woul l go with out an opportunity to levelop then f culti e

10 If more tr v les than one are tru l t in a chool each Llementary Sel ool woul l require more tl an one expert te cl er of in lu tries since none can be enerally expected to be an expert h n l i i eve il tra les I am foi a sin le tra le bein made the speciality of each vill e school

Q t (b)

11 The trade to be tru ht in an l lementry School must have re ard to the facilities that may be found foi it in the locality of the school both foi the work of the trade classes an l for the sale of tl e products All the boys fit foi a trade class may be con pelle l to learn tl e tr v le as lon v they re m in in the school althou h the special heredi tary in tincts an l powei of tl e fe v arti an boys will have in this case to be kept in abeyance for a short time this bein un vol lable even in tl e present purely liter ry course of these schools

Q t ( )

The option of selecti v tr v le ac oi lin to their l kin u d aptitude may be iven to tl e artisan is well as to the otl er boys vhen tl ey leave tl e Element ry Sel ools and are found fit to enter the special technic l sel ools refere l to in para (3)

12 It would be be t no doubt if we coul l ive in tl e Llementary Schools a general trainin in manual work inclu lin the elementary processes and operations of different kinds of industrial arts an l occupations and then let tl e boys el oose tr v les uited to tl eir ta tes an l inclin ition when they go to join tl e special technical schools Tl e sel eme of m nual trainin as recommended by the late In pector General of Lducation in Mysore in l i Special Re ort on Manual Trainin in Mysore does not ppear to have been intro luced oi worked systematically anywl ere except in tl e Elementary School attac ed to the Mysore Normal School

Tl e early trainin attainable by such a scheme appe rs to be vei y necessary and desirable as a previous preparation foi trainin in tl e tra le clas es of all kin ls of institutions The more efficient workin of this system in as many sel ools as possible if not in all de erves our l est consideration when we are tl inkin of in lu tr l e lucation of our boys It oes without sayin th it the early years are the best for tl e manual as well as the liter ry trainin

13 I do not find my elf con petent to ive a li t of the different tra le th it can be tau ht in different sel ools as this re jures a thorou h ac uaintance with the actual tra le con litions and other circumstance connected with each particular school loc lity

R l t (2)
Q t ( ) d (g)

A ood indu trial expert s opinion on this point formed after study in the re ults of the Indus trial survey of the State contemplated by the Government vould be of reat value

14 Mattin basketry carpentry tailorin smit lcraft weavin and the like may be tried in places which afford special a lvanta e foi tl e e tr v les in l school ar lenin and a riculture in as many schools as possible in parts of Gorribidnur an l other taluks where cl ep wells with a good perenni l supply of water can be sunk

15 Bamboo work may be tried in the Villa e Elementary School at Kyatasandra near Tum kur from tl e III cla s upwards The Headmaster is as intelli ent and earnest a man as can be expected in a villa e school There are about 20 families of basket and mat makers in the villa e the services of any one of whom may be hired foi about Rs 10 a month A tl atched shed of areca nut and bamboos consistin of a room an l a hall may be constructed at a cost of about R 100 oi tl e private mud hou e standin on the school premises may be purchased foi the same amount or less in addition to the amount of compensation which has been long fixed foi the ac uisition of its site The instruments required for tl e work of a pupil are only t vo—a heavy knife with a broa l half bla le and a sm ll lance about 9 inches lon includin the handle 20 sets of the knives and the lance for a class may be ot for about as many rupees and a hundred bamboos foi Rs 6 A month ly rant of about Rs 10 foi small scholarships completes the list of re jurements

16 In Japan says Baron D Kikuchi in his lectures There is almo t no limit to the variety of thin s that we can make with bamboos But foi us to bring in a foreign expert foi each little trade to be tau ht in an Elementary School oi for the boys to learn all the ima inable fine thin s th it can be ma le with the bamboos is out of question at present The ordin ry rough thin such as the medars are capable of makin are all that can be taught in the school

17 Even tl ese rou h thin s with their usual cheap rates of sale lo not find a ready market The 20 families of medars at Kyatasandra are together cap ble of producing things worth Rs 140

can be drawn up having the same division of students as mentioned under agriculture and with tools materials and work shed supplied at Government cost Two third part of the sale proceeds of materials manufactured may be kept for Government to compensate for the expenditure incurred and the remaining one third given to students A small portion of the Government share may be paid to the teacher of the industry as a reward in order to create an incentive that his income will be proportionate to the value of articles he turns out Best samples of various patterns of industrial products may be purchased and kept in the school to serve as models and the articles turned out are equal to them in quality Combined with quickness the education may be said to have been successful in that branch By looking at the articles manufactured it may often be possible to judge of the progress made

35 Most of the light industries can be mastered by the teachers in course of one or two years, and then the temporary establishment employed for this purpose may be gradually dispensed with, the teacher taking the place

36 The light industries may be changed yearly and the higher ones every two years in case of necessity after studying the desire of the people to learn fresh ones This will enable the student of each grade of society to choose to some extent the profession which he can really follow or the one to which he is naturally inclined

37 II (*h*) Under the present curriculum from 25 to 27 hours are devoted for in teaching of literary subjects in a week Taking the number of working days in a week as 5½ the period of instruction comes to about 5 hours a day They seem to assemble at 7 or 7 30 A M and disperse after 3 hours of work In the afternoon they work from about 3 to 5 thus making in all about 5 hours

38 With the introduction of practical agriculture and industrial subjects, the number of working hours in a week will be found insufficient as about 13½ hours will be required for practical classes alone To meet this requirement the daily working period has to be increased from 5 to 5¼ hours and Saturday morning hours fixed at 4¼ hours This will give us 31½ working hours a week of which 13½ may be given for practical agriculture and industries and the remaining 18¼ to literary subjects If the latter is not sufficient the number of daily working hours should be increased to 6 or some of the subjects now taught or portions thereof will have to be dispensed with Increasing the working hours to 6 does not appear feasible The number of hours devoted to different subjects may be curtailed and the subjects altered as shown in the following table.—

Subjects	Class III		Class IV		Class V		Remarks
	As it is	As it should be	As it is	As it should be	As it is	As it should be	
	Hours	Hours	Hours	Hours	Hours	Hours	
Language	7	5	6	4¼	6	4¼	
Copy writing	1		1		1		Home Work
Dictation	1	1	1	1	1	1	
Grammar	4	2	3	2	3	2	
Arithmetic	5	3	5	3½	5	3¼	
Geography	2	1½	2	1½	2	1½	Portions may be curtailed if necessary
History	3	1¼	3	2	3	2	
Agriculture	2	2	2	2	2	2	
Geometry or Hygiene	2	2	2	2	2	2	To be dispensed with and replaced by industrial subjects
Total	27	18¼	25	18¼	25	18¼	

39 Thus it will be seen from the statement what subjects can be dispensed with and what can be curtailed and the number of hours that could be secured for practical agriculture and industries About 6 hours in a week have to be set apart for practical industries at 1 hour a day and 7¼ hours for practical agriculture at 1¼ hour a day on all other days except Saturdays on which only one hour will be devoted When no agricultural operations are in progress in the school farm the students may be taken to adjacent gardens, sugar cane milling and arecanut boiling places and threshing floors, etc, for instruction and practising those operations going on there The curtailment as above of the hours to literary subjects may bring in another difficulty of one teacher being compelled to teach several classes within a short time This has to be overcome by appointing pupil teachers to teach the lowest classes when the teacher takes the highest classes The pupil teacher may be paid a rupee for his work Apart from the school students outsiders desirous of attending the practical instruction classes may be allowed to join provided they work with their own materials If they wish to work with materials supplied by the school, they have to give away the manufactured articles to Government

40 II (*i*) When locally produced articles are required they are to be purchased in the place itself In case of produce growing wild it has to be collected by hired labour or better on small contracts Those articles which can be grown in the farm may be obtained by paying the value of the cultivator's share In any case the cheapest possible method has to be adopted In case of wild produce, the boys may be made to collect if it could be done without much trouble

41 The case of text books is a very difficult one at present There are a few books written in Kannada on agriculture, but they mostly treat of general scientific principles without any practical instruction for the cultivation of various crops now raised in the Province Even what is given is very general and not of much value There are no books or records which give the minute inner details in regard to the cultivation of any one kind of crop a knowledge of which alone can make a man an expert With regard to industrial subjects there appear to be very few or no books published in Kannada for the use of those following industrial pursuits The knowledge which these men possess of the

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or more a week, to meet a brisk demand. But in the weekly fairs of Kyatasandra and Tumkur, the total sales by all the families, do not appear to go, on an average, beyond Rs. 10 a week. This keeps the workers idle for a good part of the day and the week and, of course, they are very poor. During the harvest season and "Gouri" festival, when there is some little demand, each family carries a few bamboos and the instruments, to different village centres, within the radius of 15 miles from Kyatasandra to ply their trade, and exchange their articles for payment in kind, thus earning slightly better wages than in the weekly fairs and bazaars.

18. But for the difficulty of procuring demand for all the articles that can be produced, the trade classes, recommended for the Kyatasandra school, might be made self-supporting; since the profits of the medars are always 3 or 4 hundred per cent of their capital when their goods find a sale. As it is, neither the whole nor even a good part of the cost of maintaining the classes is likely to be realized. This difficulty of finding purchasers appears to be common to almost all the trades, such as carpentry, smithery, etc.

19. The inability of our handicraftsmen to compete successfully in the market and the absence of demand for their goods seem to have induced most of them to gradually give up dependence on their hereditary trades, and to seek their livelihood by other means. The attempts at increasing the number of such men, or at improving their condition appear to require, for their success, measures calculated to create a greater demand for their goods, while the quality of their work is improved by proper instruction and training in appropriate institutions. Until a change in this direction some how takes place, to some extent, the trade classes of the Elementary Schools and the Industrial Education, in general, may not be popular or much sought after.

Questions (*f*) and (*h*).

20. A rough sketch of the time tables for the Kannada III, IV and V classes as well as for the I, II and III Anglo-Kannada classes is appended.

The number of working hours are 30 in the week, all round, instead of 25 for the Kannada, and 27 or 28 for the Anglo-Kannada classes, as in the model time tables of the Department. The slight increase of hours might not be taxing; manual work being a sort of relaxation from the mental and literary, and the proposed time tables for the Kannada classes providing 9 hours, and those for the Anglo-Kannada classes 7½ hours of manual work.

Questions (*f*) and (*h*).

21. I think that the literary course of the III, IV and V classes of the Kannada schools, or of the I, II and III classes of the Anglo-Kannada schools will not be much affected by the introduction of trade instruction; but in the case of the IV and V classes of the Anglo-Kannada schools, the literary course of the two classes would require being extended by one year, so that a boy of the IV class (2nd Form) will have 3 years instead of 2 as at present, to pass the Lower Secondary, in English.

Question (*j*).

22. For the Elementary Schools in which only literary instruction is given, the morning and afternoon hours, as at present, appear to be convenient, if the agricultural boys of the II class and upwards are given leave for a month or 20 days in the seasons of cultivation and harvest, and the artisan boys, if any, are given the option of attendance only in the mornings.

23. In an Elementary School in which a trade class may be opened, the Headmaster and such of his assistants as will have no occupation when the trade class or classes are at work, may be directed to keep order in these classes and otherwise help the trade master, especially, when the latter happens to be a home-trained craftsman, knowing nothing about the school or class management. The masters may also themselves try to learn the trade, thus setting an example to their pupils. The headmaster or the most intelligent of his assistants should keep the accounts of the trade classes.

24. Where possible, members with some experience and enlightened ideas may be added on to the present school committees and the committees asked to make special periodical reports regarding the condition and requirements of the trade classes, with suggestions, if any, for their betterment. The same may be demanded of the departmental inspecting officers when they visit the schools, the local revenue officers and village officials being told to do all they can to make the classes a success.

44

A.-V.—I Class.

Days	11 to 11-50	11-50 to 12-40	12-40 to 1-30	1-30 to 2-30	2-30 to 3-20	3-20 to 3-45	3-45 to 5
Monday	Revision lesson	English Reader	Arithmetic	.....	Kannada Reader	Writing English	Manual work
Tuesday	English Dictation	Arithmetic	Kannada Reader.	.....	Kannada Dictation.	Do	Do
Wednesday	English Reader	Do	Do	.....	Kannada Grammar.	Do	Do
Thursday	Do	Dictation, English	Do	.....	Geography	Do	Do
Friday	Do	Arithmetic	Do	.....	Kannada Composition.	Do	Do
Saturday	Do	Do	English Dictation.	.....	Geography	Kannada Dictation.	Do

A.-V.—II Class.

Days	11 to 11-50	11-50 to 12-40	12-40 to 1-30	1-30 to 2-30	2-30 to 3-20	3-20 to 3-45	3-45 to 5
Monday	English Reader	Arithmetic	Kannada Reader.	.....	Kannada Grammar.	Writing English	Manual work
Tuesday	Do	Do	Do	.....	English Dictation	Do	Do
Wednesday	Do	Do	English Grammar.	.....	History	Do	Do
Thursday	Do	Do	Geography	.....	English Dictation	Do	Do
Friday	Do	English Grammar.	History	.....	Kannada Grammar.	Do	Do
Saturday	Arithmetic	Kannada Reader	English Dictation.	.....	Geography	English Grammar.	Kannada Dictation.

This address concludes with the following words — The Elementary Schools as a factor in Industrial Education may be raised to a higher power without changing their essential character To change that character is to make them minister to commercialism instead of to general intelligence to make them train skilful fingers content to supplement a machine instead of sensitive minds content only with the highest ideals of the race —that would be to make them promoters of industrial degeneracy rather than promoters of industrial health

It will thus be seen that the first step towards preparing the pupils in our Elementary Schools to take an intelligent interest in industrial activities is to insist on proper attention being paid to the practical side of the Education given in our Elementary Schools If every subordinate inspecting officer be given an opportunity of acquainting himself thoroughly with the nature of the work that is expected to be done in the Elementary School if he is not already acquainted with it he will be able to train intelligent young teachers in his own range by holding special training classes at convenient centres By this arrangement it will be possible to supply a large number of schools with trained teachers in a comparatively short time When inspecting officers and teachers have mastered the principles by which they are to be guided in carrying on their work in connection with the elementary schools under their control an attempt may be made to introduce into rural schools and into those urban schools that are situated in localities in which some particular industry is carried on occupations which will prepare pupils to take an active share in the work carried on in the locality Such instruction however will be confined to pupils above the age of eleven years in classes above the vernacular III standard occupations involving the use of sharp edged tools or imposing undue muscular strain being considered unsuitable to pupils below the age of eleven years Thus in boys schools straw plaiting basketry book binding weaving rope making rattan work wood carving lacquer work the making of toys and agriculture and gardening may be taught In girls schools needlework including embroidery and the making of socks and woollen caps ornamental bead work and making pickle and jams may be taught A tabular statement of practical activities suggested for pupils below the age of eleven is given in Mr Habbis's Special Report on Manual Training in Schools of General Education

(*b*) As regards the question whether only one industry should be taught in a school or a variety of them I would suggest that as many of them may be taught as can be taught efficiently But as a rule it would be desirable to concentrate all attention on the one industry for the teaching of which the greatest facilities exist

(*c*) Until efficient arrangements can be made for teaching large class the teaching should be optional

(*d*) The services of the best local workman should be engaged for a limited period the teacher receiving training along with the pupils When the teacher has mastered the work the services of the workman should be dispensed with

(*e*) The remuneration to be paid to the workman would depend on the work to be done the time to be devoted to it and the skill of the teacher It may vary from Rs 5 to Rs 10 a month When the work is transferred from the artisan to the regular teacher the latter should receive an allowance varying with the amount of work done and the number of pupils the minimum allowance for each industry taught being Rs 2 and the maximum Rs 10 The amount may be fixed at Re 1 for every ten pupils or fraction of ten pupils under instruction

(*f*) Time may be provided for work by extending the course for the Lower Secondary Examination in rural schools by one year the work now done in classes IV and V being done in three years A special curriculum may be prepared for rural schools making suitable provision in it for the inclusion of rural subjects

(*g*) In the earlier stages it is desirable to give complete freedom to enthusiastic teachers to make their own arrangements with the help of local magnates and inspecting officers for giving practical courses in any of the suggested or other suitable local industries After some experience is gained of the working of these classes an attempt may be made to draw up such definite schemes as are suggested by local conditions and requirements

(*h*) Except in the case of instruction in industrial occupations all practical work is expected to be combined with the ordinary class lessons In classes in which instruction is given in industrial work ¼ of the time devoted to literary subjects may be devoted to industrial work

(*i*) There should be no difficulty in procuring locally such inexpensive material as is required for light hand work In all other cases application should be made to the Inspector General of Education at whose disposal a small allotment for the purchase of materials for rural industries may be placed tentatively for a year The Educational Department usually supplies all books required for the use of the teachers

(*j*) Eight to eleven in the morning and 2 to 4 30 in the evening appear to be the most suitable working hours for village schools During sowing and harvest seasons two hours in the evening from 6 30 to 8 30 may be allowed to be substituted either for the morning or the afternoon hours if the pupils are prepared to make their own arrangements for providing the necessary lights

I cannot conclude this brief note better than by reproducing the summary of conclusions and recommendations contained in the Report on Manual Instruction in Public Elementary Schools recently published by the Board of Education

(1) We consider that Handwork should be regarded as an essential feature in the curriculum of every Elementary School and that all possible means should be adopted to encourage it although we see difficulties in the way of its being made compulsory at present

(2) We consider that there should be a continuous and progressive course of Handwork throughout the schools from the Infants stage upwards and that it should be regarded as a method rather than a separate subject of instruction

(3) Although we recognise that the majority of existing teachers have had no special training in Handwork we do not regard this as an argument for postponing the introduction of this form of work We think however that it is eminently desirable that a knowledge of Handwork principles should be an element in the training of all future teachers and that increased facilities should be available for giving such instruction to existing teachers.

(4) We consider that the ideal system is one in which all form of Handwork should be taught in the schools themselves by the ordinary teachers and that in schools of sufficient size a room should be set aside for this and kindred purposes At the same time we fully appreciate the valuable work that is being done in the Handicraft centres though we are of opinion that more might be done to bring them into touch with the ordinary work of the schools

It is thus clear that the real remedy for the defects in the existing system of Elementary Education is to be found in improving the methods of teaching the ordinary school subjects by making suitable arrangements for the training of teachers and by creating facilities for practical work and manual training This is a matter which has already engaged the attention of the Education Department which with the active support of His Highness Government will be able to do in due time what still remains to be done

BANGALORE
10th December 1910

C KRISHNA RAO

Note —As the discussion at the first meeting of the Committee revealed a considerable divergence of opinion as regards its objects and the scope of its work I have thought it necessary to say a few words on the point of view taken by me and to treat the subject as a whole Further I find that for the answers to the queries sent round to be *consistent* they have to be made with reference to some *consistent* scheme I have therefore given an outline of the one I have in view I have answered the different questions wherever they could be appropriately dealt with

This note is divided into two parts with sub heads as indicated below —

PART I

A Preliminary observations—
(1) The point of view
(2) Past experience
(3) The causes of the failure of Elemetnary Industrial Schools and remedies
(4) The chief function of an Industrial School

B A general consideration of the scheme—
(1) What is an Elementary School ?
(2) The drawbacks of the existing curricula and remedies
(3) Where to commence and end Industrial Instruction
(4) The course
(5) Hours of practical work
(6) The teachers
(7) Industries to be taught
(8) How they should be taught
(9) The number of school
(10) Equipment
(11) Girls
(12) Some last words

PART II

The Scheme proposed—
(1) Inter connection between Industrial and Literary courses in Elementary Schools
(2) Time devoted to various subjects
(3) Industries to be taught and the centres
(4) Teachers
(5) Equipment
(6) Cost

PART I

A PRELIMINARY OBSERVATIONS

(1) *The point of view*—What this Committee has been asked to consider is the subject of providing such *practical instruction in Elementary Schools* as would enable *the pupils to turn to some practical walk of life to earn enough to live upon* And this evidently means that the committee should aim at something more than mere Manual Training under the different heads of agriculture carpentry and so forth Manual Training is undoubtedly the best ground for preparing a child for receiving Industrial Instruction but the aim of the former is not directly to earn a living while that of the latter is

It was contended by many of the members that what is required is only a Manual Training Scheme and that though the aim of Manual Training be technically not to earn a living yet it would certainly help one to produce articles of trade To them it has to be pointed out that an experiment of the kind has been made in India which has proved a failure Mr J G Cumming I C S says in his special report of 1808 on Technical and Industrial Institutions (page 33) Let me first clear away some misconceptions One is that Manual Instruction is Industrial Education I am afraid that many both pupils and teachers entertain this belief Manual Education is now a days held in Europe to be a part of general education one of the objects is to overcome the traditional prejudice amongst certain classes against manual labour Manual Instruction is used in certain Missionary Schools in the hope *not always realized* that the boys who do not belong to artizan castes will earn a living afterwards in a handycraft

Again a high educational authority on Manual Training and Industrial Instruction whom I had occasion to consult in this connection says As far as I can see the (Mysore) Government order contemplates the teaching of Industries or trades in Elementary Schools Manual Training may be a preparation for but it cannot be industrial training If such easy industries as the making of cotton tape or small baskets of leaves rushes or bamboos are meant to impart Manual instruction and at the same time teach a trade or Industry in Elementary Schools the manual training would be *imperfect* and the child would *certainly now* be able to make his own living by the trade

In the same way as all general Education facilitates to a certain extent the making of one s living manual training whose aim is also general Education may help one to earn something but not to pursue a trade For says no less an authority than Dr Balliet of America that the Manual Training School does *not aim at teaching a boy a trade* and that instruction in trades is *specific* specialized in character and is *only* for those who wish to *practice* them Again he says while developing the *mind* is the chief aim of manual training to make a thing is the industrial motive

Again the Committee is not concerned with the large question of Industrial Education in general though the subject on hand is connected with it And among schools of an Elementary character there are those that devote almost the whole of their time to the teaching of the industries and there are those that set apart only a portion of the school day for this purpose The former are generally known as separate Trade schools The latter which combine both literary and industrial instruction are variously styled Government do not appear to contemplate that institutions of the former type should be considered here The Committee s work then is confined to the question of teaching a few of those common industries that easily lend themselves to educational methods and that can be taught along with literary subjects in what may be termed Elementary Schools

Small as the question appears to be its difficulty is really great Writing of Elementary Industrial Education Mr Nathan in his Quinquennial Review of Educational Progress in India 1904 observes This subject which has taxed the ingenuity of the Educationalists of all countries presents a specially difficult problem in India For the organized industries the conditions are not dissimilar from those which prevail in Europe But for industries which are prosecuted on a small scale by the majority of the industrial population in India they are much more complex and difficult And the latest and the highest authorities on the subject equally recognize its great difficulty

Nevertheless it would be said that the right way to solve the question is to set about it by starting some schools and working them *i e* by doing rather than by discussing about unknown and imagined difficulties and contingencies But whatever the procedure adopted in solving it would not be considered desirable to ignore past experience especially in view of the difficulty of the subject

2 *Past experience* —In British India where a large number of such elementary schools are of the type of separate Trade Schools the last 10 years from 1901 onwards has been a period of much enquiry in this direction The report of the Col Clibborn s Committee the two Government of India Resolutions of 1903 04 and even Mr Cummin s Report (Bengal) of 1908 not to mention other books like Mr Nathan s Quinquennial Review are all unanimous in holding that till now experiments in this field have met with little success

Turning to Japan a country which at one stage of its industrial development passed through experiences somewhat similar to ours and in which a large number of both the types of the combined and the separate schools exists we find the following in Professor Sharp s report After the introduction of the new educational system the desire to promote the material development of Japan led to various efforts in the direction of Technical instruction *Supplementary* Technical Schools were organized Agriculture Commerce and Manual work were made optional in the *Primary* Schools and permission was given to introduce special courses in these subjects even into Middle Schools *But too little advantage was still taken of these technical alternatives* A scheme of State subsidies was also introduced Special institutes were established to train teachers But until these (certain conditions to which I shall refer later on) were developed technical instruction *languished* Again *until these came about the mere provision of technical schools and the like produced no effect* [The underlining is mine]

Writing about the teaching of agriculture in Elementary Schools Mr Bhabha in his special report says It is commonly asserted somewhat hastily as an obvious truth that the elements of agriculture should be taught in all village schools These advocates are little aware of the difficulties He quotes authorities to show that the experiment has resulted in failure in the United States of America in France in Ireland and in Cannada

There is also an impression that the private or grant in aid schools in India have succeeded in finding a way out that Mission Industrial Schools some of which are of the combined type have been successful and that the State could easily follow in their footsteps Now the true test of the efficiency of the training given in an Industrial School is whether old pupils are actually earning their livelihood at the craft which has been taught to them? And judged in this light the success of these schools is almost nil for very few of the pupils have yet begun to earn at their trades independently of help from outside And the great majority of even these schools as the various British Indian Official reports show still share the common fate of Industrial Schools in this country But for Government grants which are in some cases lavished on them they would have had a different tale to tell Lavished I say for taking Mysore there is hardly any grant in aid school that has obtained a single pass certificate for carpentry blacksmithing or any other similar trade at any recognized public examination The so called Industrial Schools are only Industrial *firms* which being heavily subsidised by Government have been killing the local private enterprises a result the very opposite of that contemplated by Government No tangible signs of *educational* work in them are visible

Next granting for a moment that Mission Schools are a success Government can never adopt their principles for it must be remembered that it is chiefly the orphans that they educate And they naturally compel the pupils to learn the trades taught in the schools Even the boys that are not orphans being chiefly children of Christian parents are under the influence of the Mission authorities who if any of their pupils prove a failure in one trade invariably help them to find employment in another But can Government assume such responsibility and contemplate forcing their subjects to learn the particular trades thrust upon them especially when it is problematical whether the trades will pay in after life? Even if some industrial or commercial training could be early and rightly made compulsory in the case of those attending school the parents would not waive their right to choose the trades they like for their children

Instances and authorities could be thus multiplied to show that Industrial Schools especially those intended for the majority of people in India have hitherto not been successful as the Government of India Resolution of 1904 referring to such schools clearly says Much has still to be made for the kind of institution which will take root in Indian soil

3 *The chief causes of failure and the remedies* —Turning next to what is of greater importance to us here the causes of the failure of such schools we find that they are various and many But we are concerned here only with those that have an educational interest and shall confine ourselves to the chief ones

Now why do so many that learn their trades in the Industrial Schools turn away from them when they enter life *as has been so repeatedly pointed out in every official report on this subject*? And in the next place why do so many whose caste and hereditary associations naturally drive them to their ancestral callings seek other trades in life I am not speaking here of those that seek Government Service but of the many that change from one trade to another And again how happens it that the Mysore Census figures making allowances for all errors for 1891 and 1901 show a marked decrease of population under certain leading industries like Wool and Fur and cotton and Hardware (iron) while they show a disproportionately large increase under other heads such as the preparation of food stuff etc and Tailoring and Silk? (*vide* Part I page 734) This cannot be attributed wholly to individual whims and tastes—Among all the causes that bring about these results the most potent appear to be the fact that the hereditary trade or the trade taught in the school is less remunerative in spite of the trouble undergone in learning it at the school or under the parent or that other callings pay better for the same qualification in the wage earner

Schools for industrial instruction may be opened by the hundred and rupees spent by the thousand as was done in Japan at one stage all that will be of little avail in improving the situation Boys will eagerly take to the courses when the first announcement is made as they have often done in the past whenever Industrial Schools were opened But when in the course of a year or two the novelty wears away when their minds are disillusioned that is when they come to see that School taught trades do not pay in after life they will desert the schools Or if to cover this defect in the will continue to send in their children for the sake of this small advantage so long as it lasts But system scholarships be continued poor men no sooner the pupils leave school than will they naturally pursue occupations that pay their capacities best Further when the parents see that the training given in the Industrial School does not bring in more wages they will rather keep their children at home than send them to such schools I have repeatedly asked a number of villagers whether they would send their children to trade schools if such were started in their villages The uniform reply has invariably been Yes if we can earn something *more* thereby

It is then this economic and commercial value of the teaching that chiefly determines the success of such schools or in the words of Mr Cummins one of the latest Indian authorities on the subject this factor is an *assured* livelihood And wherever this factor has been overlooked the school has not thrived

This seems to be an obvious truism Nevertheless it has been much ignored in India To emphasize the importance of this inseparable and intimate connection between the *economic* and the educational aspects of Industrial Training let me quote a pregnant sentence from Professor Sadler one of the highest educational authorities He writes in the chapter on this subject in his Reports Volume 11 — In his testimony Dr W T Harris (Commissioner United States and no less an authority in matters educational than Professor Sadler) with characteristic thoroughness and insight deals with the subject (of Industrial Education) quite as much from the *economic* side as from the educational

Another equally important circumstance that has contributed to the failure is the want of competent teachers As this fact however is fully recognized by every one dealing with this subject I will not say anything more on this head

These two important causes Japan has tried to remedy like many western countries by means of what are known as Experimental institutions which also serve as Normal Training *Schools for* industrial teachers The importance of experiment not only in developing agriculture but also in making agricultural education a success has been fully recognized by the British Indian Government (*vid* the Government of India Resolution 1904 para 37) But they do not appear to have thought it equally necessary to adopt the same course in matters industrial or technological in spite of the recommendations of the Col Clibborn s Committee In Japan the experiments in the colleges and the institutes and the subsequent demonstrations especially at the elementary schools have convinced the agriculturists how commercially profitable it is to train up their boys in the modern Agricultural *Schools* which they were fighting shy of till they were actually given ocular proof of the economic advantages What is more the same method has shown the industrialist in Japan in what ways he could make his trade more lucrative for fear of being too lengthy I shall quote but two passages

The Technical College of Tokyo —This school was remarkably successful in its *experiments* with silk weaving umbrella fabrics earthenware etc so much so that people interested in umbrellas began to come in order to see how the stuff was made This school has attached to it also a *Supplementary* school of industry and an institute for training industrial teachers It has throughout exercised a very great influence on the Industrial progress of Japan by supplying both technical workers and teachers (Professor Sharp s report)

The Department has tried to get over this difficulty (of finding competent Industrial teachers) by devoting a part of the money to the training of teachers Training institutions have been attached to the Agricultural——to the Technological——and to the Commercial Colleges of Tokyo (Baron Kikkuchi s Japanese Education page 303)

The chief function of Industrial Schools —Suppose in a village or small town a basket maker a carpenter or a blacksmith has three or four sons When these grow up and set to work on their account all the three or four cannot find enough work for the needs of the village or its neighbourhood do not treble or quadruple in a generation While in some trades the needs may increase in others they may decrease or there may be a fall all round To add to this there is the powerful factor of foreign competition And this is what the three or four sons usually do One follows the father s calling and sometimes two The remaining sons take to agriculture as a rule if they have capital or become coolies and mendicants if they be poor and ignorant They cannot turn their hands to any other trade in the same locality or elsewhere excepting big Cities for each of the trades unless fortunately plague carries off its working hands has the same difficulty to combat If any of them be intelligent however they proceed to towns and cities to try their luck there Even in agriculture the lands get divided and sub divided and many are obliged to seek their livelihood by entering other callings unless they have capital enough to cultivate more lands Though actually every artizan may not have three or four sons yet it will be clear that our present disease is not want of *hands* but want of *work* And work cannot be found for various reasons the chief of which are (1) want of capital and (2) want of knowledge of new industries or new methods This committee is not concerned with the subject of capital Then it is asked of what use is it to teach in a school all the sons of the carpenters and blacksmiths and basket weavers their hereditary occupations when there is not enough work for them all? The Government of India s principle that pupils of the Elementary Industrial Schools should be made to learn only their fathers trades is evidently unworkable excepting probably in large Cities

If the object then of the school is only to teach the old known processes it will having the advantage of a Government subsidy only try to multiply trade hands without regard for the economic conditions which will make the remedy worse than the disease and the people will naturally turn away with disgust from such instructions as they have done already in the case of industrial schools

To earn a living one has to follow either the father s trade or a new one In the former case if the pupil is to earn by working according to known methods or processes no school can teach so efficiently as the farm or the workshop of his father or of some of his friends If on the other hand the pupil has to learn any new methods or new trades that would pay him better he may and will have recourse to a school The school has therefore a useful function to discharge only if it teaches *in addition to what is known* new methods or new industries

Such new methods and new industries could be learnt only from experiments made with reference to local economic conditions And to teach them *experiments and training of teachers must precede the attempts to teach*

B A general consideration of the scheme —Reverting to the main subject from the above necessary *digression* we may consider the various factors of the scheme in the light of what has been just said

(1) *Elementary Schools* —The Mysore Educational Rules do not clearly indicate what is meant by Elementary It is usual to treat the Lower and Upper Primary Grades as Elementary Pupils would then be only 9 years of age when they finish the Elementary course Again the word elementary is made to cover the period from the sixth year to the eleventh of a child in some cases (*vide* Mr Bhabha s special Report page 129) Whether the age be 9 or 11 at the time of finishing the Elementary course it is literally impossible to teach any trade so as to enable the pupils to earn a living on leaving school And one of the greatest problems of modern education is what to do with boys that leave school when they are still physically and morally unfit to become wage earners In Japan the Elementary course lasts up to about the fourteenth year so also in America According to the latest authorities for success as craftsman one ought to possess not only physical strength but also a sense of responsibility and mechanical ingenuity together with resourcefulness judgment and adaptability qualities which cannot be developed at a very early age

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In Mysore it is desirable therefore to treat for purposes of industrial instruction even the period between ages 9 and 13 as Elementary though it is called the middle grade period (*vide* page 1 Part II of this note for a tabular view)

2 *The drawbacks of the existing curricula and remedies* —As a corrective to the exclusively literary character of the existing curriculum of studies in the Elementary (the Primary and Middle grades) some practical work in the shape of Kindergarten and Manual Training was introduced by Mr Bhabha some time ago But his scheme has not yet been fully assimilated into the system So far as the lower grades are concerned all that is needed now is only to adopt his scheme more completely

But this practical work is considered inadequate for the classes above the primary grades that is for boys of above nine years of age Many such lads discontinue their studies owing to natural incapacity or domestic difficulties Though some of them may go up even to the Lower Secondary Standard yet they fail to attain that degree of literary proficiency that will enable them to enter the more intellectual walks of life In such cases the exclusive attention paid to literary studies coupled with the loss of touch with the trade work of their parents has made a large number altogether

helpless in earning a living Many young lads are compelled to pursue a literary course though they are naturally unfit for it merely because there is no technical or industrial alternative and because they are too young to earn wages As a remedy for this state of affairs it is considered necessary to devote a portion of the time to the teaching of some handicrafts in the classes through which pupils of above nine years pass

As it is not considered desirable by some of the best authorities to effect a divorce between the literary and the industrial sides of education even between the ages of nine and thirteen sufficient provision should be made for both The Government of India resolution lays down the uniform principle that in the Primary Schools the work should be so divided that half the day is given to each But even at the age of nine not to say anything at lower ages this will be felt a great strain It appears more desirable to have a scheme sufficiently elastic so as to suit the different ages of boys as well as their intellectual and physical capacities and natural tastes

In the case of pupils that give up the literary side altogether and confine themselves chiefly to the industrial more time could be devoted to practical work and the Industrial course could be finished in a shorter period If on the other hand the two sides be prosecuted together the course must be of longer duration

To find time for Industrial training such subjects as History and General Geography which may not be of much practical use may be given fewer hours Drawing the most important subject now not only from the point of view of general education but also from that of the Industrial should be introduced

The Japanese curriculum which has been drawn up after a most careful study of all the European and American ones may be taken as a model But it cannot be adopted fully as the Mysore system of Elementary Education differs from it in some respects And what is wanted here is a scheme that would give us the facilities of both the combined and separate types of Industrial Schools of an elementary character

3 *Where to commence and end Industrial Training* —It is now everywhere admitted that some elementary instruction of a general character is necessary for a boy or girl before he or she begins to learn a trade And the age at which Industrial training should commence is fixed differently in different Countries Some countries like Japan commence at the age of 12 others between 13 and 16 But in many of these countries especially in the mills and other large factories wage earning begins comparatively early which has a most undesirable effect upon the industrial class as a whole

As to where it should end it must vary with the standard of instruction given There are three year courses four and even five year ones for even an Elementary kind of training Then there are longer courses for higher or advanced studies

In Elementary Schools where combined literary and industrial instruction is given in America (such for instance as the University Elementary School Chicago) three years is the length of the industrial course In Japan in the supplementary and B Schools 1—4 years training is prescribed Further even the shortest course required according to the Madras Educational Rules for one to become an artizan is one of four years In France the courses run from 2 to 4 years in Switzerland 2 to 5 years and in England 2 to 4

In the face of these facts it is really difficult to understand what the Government of India Resolution means when it says in para 12 that the boys in the *Primary* and Higher *Primary* Schools should learn under approved artizans the trade thoroughly and not merely the Elementary processes In the first place such pupils can have no preparatory grounding at all in General Education In the next in the Primary classes pupils will be between five and eight and in the Higher Primary about 9 years of age What trade the Government of India thinks could be taught from the fifth to the eighth or ninth year so as to produce artizans who will rise to a distinctly higher standard both of general intelligence and of manual skill than can be obtained by the ordinary traditional routine (Para 11) it is not easy to guess unless the pupils in these classes be of higher ages

In Mysore then both on the ground of age and on that of preliminary general instruction it is advisible to commence from the IV class in the Vernacular Schools or the II class in Anglo Vernacular Schools and to prescribe courses according to local requirements

At this stage the boys will be as per Departmental Rules between 9 and 13 years old But in actual experience the boys especially in places other than District Headquarters will be found to be of higher ages somewhere between 10 and 14 14 or 15 is a fair enough age for one to finish the courses in India

Again it must begin only after a certain stage in Manual Training has been reached For the most scientific and now almost universally recognized basis for Industrial instruction are the Kindergarten and Manual Training in the classes up to the Vernacular IV or English II class These have been partly introduced into our Educational system Their full adoption according Mr Bhabha's valuable suggestions in his special Report is an urgent and indispensable necessity The success of every kind of Industrial instruction will depend very largely upon a proper working of the Manual Training scheme for teaching this subject all the suitable materials available in the neighbourhood of schools could be utilized *irrespective of the economic or commercial value of the products* (For further details *vide* scheme Part II)

In Elementary Schools with classes below the Vernacular IV or English II that is where boys would be of ages below 9 or 10 no Industrial instruction is possible they must be satisfied with Manual Training which will also be of great help to them in life or they may be allowed to join one of the schools giving Industrial Instruction and undergo Industrial Training alone for two three or four years according to their capacity This may be allowed as a special Industrial course But no boy below nine years should be admitted

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4 *The course of instruction* —It has been pointed out that the length of the course should vary with the needs The course of instruction should be such as to give a boy as much knowledge as is necessary not only to enable him to earn a living but also to make him a better wage earner than a fellow tradesman without this school training Now the lowest grade of such course for Indian conditions is that prescribed for the Madras Elementary Technical Examination which covers the four Standards A B C and D as given in the Mysore Educational Rules Part II Page 54 Now this course of four years is an elastic one It can be shortened to 2 or 3 years if need be as I have it on the authority of a good foreman who has himself passed through the course The shortening will depend upon (1) the nature of the trades learnt (2) the age of the pupil and (3) the time devoted exclusively to it At any rate two years would be the least time required

Public examinations and the granting of certificates are absolutely necessary Else the work done by the teacher will be a sham as is now the case with a number of Industrial Schools

5 *The number of hours for practical instruction* —The time allotted for practical work varies with different countries and in the same country with different schools Again one hour a day will be too much for some trades and 5 or 6 hours will not suffice for some others like agriculture A separate and special table of working hours is required for the agricultural class But as for the other industries 4 to 6 hours a week would be enough as the Madras Educational Rules say (*vide* hints and suggestions on the management of Industrial and Technical Schools) Some leading schools of America give 9 hours a week for 3 years and 4 to 5 hours a week in advanced classes in Japan in the Elementary grades of schools about 3 hours a week is devoted In more advanced ones 18, 22 and 28 hours are devoted to practical work Considering the physical capacity of boys of this country and also the standard of work to be turned out 6 hours a week for four years in Anglo Vernacular Schools and 6 hours a week during the first two years of the Vernacular School course and not less than 18 hours a week in the years devoted exclusively to Industrial instruction ought to suffice I have been further assured by the practical foreman that I have already referred to one that has passed the Madras course here prescribed that this allotment of time would be adequate

6 *The teachers* —That the want of competent teachers is one of the greatest difficulties in Industrial Education has already been pointed out It is a great mistake to appoint men who are teachers in the literary side for this work also howsoever much they may know of the theory

Men that are first appointed must especially be of as high a qualification as possible as they have not only to produce the best impression the impression that it is really profitable to pursue the trade taught in the school but also to train up the future teachers

Every teacher must not only possess practical knowledge but also be up to date in his trade business as well as in the methods of teaching it For this purpose it is necessary to have as in Japan Teachers Manuals prepared with special reference to local conditions for each industry taught in the schools

For Manual Instruction in addition to the training that teachers get in the Normal School Mysore they may be given some training in the Industrial School at Mysore in cane work and the like They may also attend a short course say of three months in practical instruction at the Lal Bagh Bangalore to enable them to learn School gardening work

7 *Industries to be taught* —In the existing conditions it is not ever industry in the country that can be taught in a school Only such as the teaching of which will convince the parents and pupils of the economic and commercial advantages of pursuing them on the lines taught should be introduced There are a number of fallacies in the methods adopted in determining the teachable industries Without going into details I may point out a few

(1) It is generally assumed that a school for teaching an industry for the products of which there is a *great demand* will thrive Seeing that for articles of iron and wool there is almost a universal demand I have often asked the village Blacksmith and the small kumbli weavers whether they would be glad to have their sons trained in their trades? Their reply was to this effect Of what use is it to learn to produce these articles in these days when even the smallest nails and agricultural implements from foreign countries are sold so cheap in our villages? Of what use is it to learn to make kumblies when machine made blankets can be purchased at such low prices? Sir if you can teach us anything new or any method by which we can earn more at these trades we will gladly send our children to your school Though there is a great demand there is a corresponding supply from other sources which it is not possible to compete with howsoever many may be the number of hands working on the old lines

(2) Again is it the existence of a *very large population* practising a single industry at one place that can determine the success of a school? Let us look at our schools at Chiknayakanhalli and elsewhere or better still let us took at Salem one of the most noted centres of cotton cloth manufacture It has a very large weaving population From the Educational point of view the Government factory there proved a failure (*vide* Mr Chatterton s paper in the Report of the first Indian Industrial Conference) in spite of the direction of a highly educated specialist like Mr Chatterton Evidently there the parents loom was found a better school than the factory

(3) *Abundance of raw material* in the neighbourhood for industrial purposes is considered another ground for teaching a trade Buttons made of cocoanut shells or such other curiosities are pointed out as strong grounds for starting schools Fine mats made but of rushes and the like are spoken of in the same strain But the question is will they pay if pursued by a large number? If so under what conditions should the manufacture be carried on to make it pay? They may be taught in an industrial school maintained by Government or in a Manual Training School merely for the exercise or pleasure they give But will the people take to the industry if it does not bring in sufficient profit in life?

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To the same cate ory belon the attempts at makin candles and soaps in the malnad especially the latter thou h it can be practised as a cotta e industry Nor is the case different with dyeing though it l as a very bri ht future before it in Mysore

It is gene ally argued that what is wanted for the Agriculturists is only sound instruction in Agriculture Here is what that high authority Dr Ha ris whom I have already quoted says It must be remembered that a population that is ent rely en i ed in Agriculture may double or treble its production by transferrin one half of its a riculturists to tl e work of manufacture and commerce If economic sc ence teaches this truth is it desirable to open only a scl ool for agriculture where the population consists largely of agriculturists ?

A ain a difference has to be made between city trades and country or cotta e ones from the educational point of view They require different types of scl ools

The details of this subject are too complex to be considered by this committee here It will however be enough to point out tl at what may be a safe guide pass is a resolution of the annual convention of *1909* of the National Society for the promotion of Industrial Education United States Each Trade School must choose those trades for which tl ere is *most urgent need*

To ascertain definitely what industries could be tau ht and how they should be tau ht *so as to be economically advantageous* we require an experimental institute is in Japan Without such insti tutions no scheme of Industrial Education will be a success in India But as tl e or anization of such inst tutions requi es time tl e next best course sl ould be adopted A special Committee may be appointed to make enquiries and publisl ed every seven or ten years Reviews somewhat like Mr Cummin s Review of tl e Industrial Position and prospects in Bengal with *special reference to Industrial Education* The Industrial Survey now contemplated by Government does not appear to cover this ground

8 *How industries should be taught* —Nowadays when a pupil tries to apply in life what he has learnt in the scl ool he finds himself at a disadvantage inasmuch as he neither has a wel equipped industrial school with a ni mber of unpaid or low paid pupils working in it nor get a subsidy or grant from Government nor is paid a monthly salary by any body In other words the teacher only directs tl e pupil to do so and so when the pupil starts life But what is wanted is that the teacher should place him self in the position of tl e wa e earner and see if what he teaches would really brin him a l ving The Do as I say and you will et on method is the bane of Industrial School teachin The Let me first do as you will have to do when you work for yourself method should replace it

In short unless there is some *assurance* that a tra le will pay no parent will send his children to school to learn that trade The assurance can be brou ht home only by practical demonstration in the workshop or in the farm

The conservative nature of humanity in general will make people hesitate lon before adoptin even the most useful measures if they be new To give a sin le instance Doctor Harold Mann says in his paper contributed to the First Indian Industrial Conference A friend of mine took up some land in Assam to cultivate for ordinary country produce Trained as a farmer he at once adopted methods which appeared strange to the ordinary cultivators of tl e locality but which cost little or nothin to do As an illustration l e changed the method of yoking tl e oxen to the plough which con siderably increased the work they are able to do At first the surrounding raiyats laughed and ridiculed Within a year they had adopted the same method

Now a hundred books on A riculture may have taught in the Lower Secondary classes or a hun lred issues of the Agricultural Gazette may have published or a hundred lectures at the exhibitions may have expounded this i lea first All of them together would have hardly succeeded in producing an effect equal to that produced by this single demonstration a demonstration which impressed upon the raiyat not the novel or tamasha side of it but its economic advantages

9 *The nun ber of schools* —The difficulties (1) of findin competent teachers (2) of selectin such industries as will pay if learnt in school and pursued and (3) of producing a good first impression on the people (it will be remembered what great importance should be attached to *impression* in the connection with Industrial education) necessitate the exercise of great caution in fixing the number of schools to be organized *at the commencement*

It is laid down by a body of experts (*vide* Sadler s Report Volume II page 198) that the development of trade school instruction depends to a very lar e extent upon the needs and the character of the people for whose benefit the instruction is iven As such we require especially local men who can understand the country best for teachers

But at the startin we may not find so many qualified hands here Further the sudden orga nization of a new department or sudden expansion of an old one on a lar e scale necessitates the importation of outside men even for work that could be better turned out by the natives Lastly if the first batches that are trained do not readily find openings the disappointment will seriously retard the progress of Industrial Education by discoura in others comin after them And if those that are appointed first must be experts or specialists they will have to be paid hi h salaries

Japan developed her system of Industrial Education very cautiously Although says Baron Kikuchi in 1908 a be inning of techn cal education more especially in its hi her branches has thus been made yet it is within recent years, perhaps within the last ten years that great impulse has been given to the technical education in all its gradations Japan began with those schools which they have now been converted into central experimental institutes and then slowly opened other institutions

It is therefore highly desirable that the number of schools giving Industrial training should be very limited at first

5-3

Equipment —As the object of the present scheme is to teach such industries as can be practised chiefly in small places and by the poor artizans costly machinery or processes or implements are out of place in such schools What is practised in the work shop must be adapted to the circumstances of the artizans and yet have economic advantage

Next a large number of pupils at the beginning is highly inadvisible for many of those that rush in at first will eventually fall off And among boys this is a contagion that will rapidly spread which will retard the progress of the school

Further it is better to equip fully a small class than to equip inadequately or badly a large one For if the teaching should fail to produce the right impression at the beginning more harm than good will have been done to the cause Parents and pupils will shun the school And subsequent efforts will be uphill work

Again authorities on the subject hold that 12 is about the largest number that one teacher can satisfactorily manage in the work shop

Separate buildings and demonstration farms are an indispensable necessity They do not require much comment here

What is wanted *at the beginning* is a small number of schools small classes well equiped and a small number of teachers well qualified and well paid and appointed under the conditions noted in the scheme proper

Girls —The question of teaching the trades to girls has not been separately considered inasmuch as the number of girl-pupils likely to undergo industrial training may not be many at the commencement However handicrafts like bamboo and ratan work tailoring and mat weaving may be taught to them wherever a sufficient number seeking such instruction are available If girl pupils be above eleven years of age it is absolutely necessary to have them taught by females

Many other subjects may be introduced if people evince more interest

Some last words —I It will be clear now that in the case of General Education the question of calling or profession or anything calculated to fix a pupil to a particular course of life and a particular standard of wage earning is absent And the work of spreading such education can be carried on without much concern Where as in the matter of Industrial Education the subject of enabling one to earn his livelihood and of giving some shape to ones practical life are directly involved And men will hesitate to pursue trades that will not pay Unless there is some assurance that the trades taught will be comparatively profitable the schools though only of the most elementary type will not be a success

No doubt crafts like basket making mat weaving tailoring and country shoe making especially the elementary stages of them do not require any superior skill and as such may not require any serious consideration for teaching them in village schools But when the scheme aims at multiplying hands the economic sphinx presents herself and demands an answer If we should therefore simply start industrial instruction without due consideration to the local and economic conditions we shall only be repeating the past errors and be wandering aimlessly

The choice of industries to be taught and where they should be taught and on what lines the teaching should proceed to be commercially and economically advantageous should all be investigated with special reference to local conditions by a small committee of men with a good knowledge not only of the educational but also of the economic conditions of the country or rather of men who can look at things from a sound economic stand point They must study each subject on the spot and make a report as have done the special committees or officers deputed by the British and other Governments for such purposes

II No scheme of Industrial Education can be said to be complete and can be a success in any sense until it is coupled with its sister commercial education You must not only be able to produce articles but also to find a sale The one without the other is bound to end in failure And I may add that this holds true even in the case of the most elementary stage of industrial education And so far as the elementary aspect of this subject goes I have considered it and proposed commercial correspondence etc as one of the subjects to be taught The point however deserves more serious consideration than I have given to it in this note.

PART II.

The scheme in view.

The connection between the scheme proposed and the existing system will be seen in the following table. The necessary alterations in the existing curricula of the Elementary schools are noted in the sequal.

Pupils age	Vernacular schools			Proposed Industrial Training or Manual Training	Anglo-Vernacular Schools		The courses in the Industrial Training
	Grade	Standard	Final Examination		Class or Standard	Final Examination	
12—13	Middle			Standard D — Industrial Training	V A.-V.	English Lower Secondary	The standards A, B, C and D for the principal industries as in the course of instruction for technical schools Mysore Educational Rules, Part II, and in the Madras Educational Rules.
11-12	Middle			Standard C — Industrial Training	IV A.-V.		
10—11	Middle	V	Vernacular V Lower Secondary	Standard B — Industrial Training	III A.-V.		For Agriculture and sericulture special syllabuses have to be drawn up.
9—10	Middle	IV		Standard A — Industrial Training	II A.-V.		
8—9	Upper Primary	III		Kindergarten or Manual Training	I A. V.		Kindergarten and Manual Training to prepare pupils for Industrial Training as now taught in the Mysore Normal School and as further elaborated by Mr H J Bhabha at the end of his special Report on Manual Training
7—8	Upper Primary	II		Kindergarten or Manual Training			
6—7	Lower Primary	I		Kindergarten or Manual Training			
5—6	Lower Primary	Infant		Kindergarten or Manual Training			

Industrial Training will be optional but Manual Training will be compulsory in the absence of Industrial.

No 'Industrial Training' will be given to a child till he is fully nine years of age and till he passes either the Vernacular III or the Anglo-Vernacular I Standard. At this stage he will have *five* alternatives open to him.

(1) The Industrial course alone of 'two' or 'three' years, according to physical and mental capacity and according to the nature of the trade learnt.

(2) The Industrial together with the Vernacular course (for the Lower Secondary Examination) taking a 'three' year Industrial course.

(3) The Industrial together with the English course (for the Lower Secondary Examination) taking a 'four' year Industrial course.

(4) The Vernacular course alone (without the Industrial).

(5) The English course alone (without the Industrial).

There is also a subsequent *sixth* alternative.

After joining the Vernacular IV or the Anglo-Vernacular II Standard, he may, at any stage, discontinue the literary side and turn exclusively to the Industrial, taking a 'two' or a 'three' year course according to capacity and nature of trade.

As for the present, Industrial Instruction will be given only in the schools of the Lower Secondary Standard, and pupils of lower schools in the villages have to go to places where industrial training is available. Scholarships should be given to the poor among them.

Whatever the length of the course the Industrial curriculum covers the same ground, that is the four standards A, B, C and D. In the case of the two years' course, A and B may be taken in the first year, and C and D in the second. More than half the day should be devoted to practical work.

In the case of the 'three' year course, A and B must be gone through in two years, and C and D combined in one (third) year. More than half the day should be devoted to practical work in the third year. In all other cases one hour a day should be given to it. During the first year the pupils preparing for the Vernacular Lower Secondary Examination cannot devote more than an hour. After the examination a whole year may be spent in the Industrial class alone.

In the third year of the three year course no other literary studies should be pursued in school than English and Drawing This English should be such as to enable him to join the English classes later on if necessary

The four year course is spread out so as to enable the pupil to find time to study English and other subjects for the Lower Secondary Examination one hour a day uniformly throughout is all that is required for practical work

Both in the Vernacular and in the Anglo Vernacular schools the pupil will go through the Industrial courses irrespective of the promotions in the literary classes

If there be a particularly weak pupil any of these courses may be extended by another year at the discretion of the parent

In case no industrial training is gone through the time allotted to it should be devoted to school gardening and gymnastics In the classes below the Vernacular III or Anglo Vernacular I or when a pupil is below nine Manual Training is all that can be given It gives the pupils the elements of industrial training in such crafts as mat weaving basket making gardening and the like

Time devoted to the several subjects —In the IV and V Vernacular Standards and in the IV and V Anglo Vernacular classes as well the pupils generally do 27½ hours of intellectual work a week This has been reduced to 24 in the former and 26 in the latter by cutting down the time allotted to certain less important subjects *Drawing whose supreme educational value is now universally recognized has been included* Provision has been made for 6 hours of shop work in the former classes and 4 hours in the latter This may be treated as physical exercise or recreation work

The following table shows the existing time table (only the approximate number of hours is given for sake of convenience) and the proposed one as compared with that of the corresponding stages of Elementary Instruction in Japan

Subjects	Existing		Proposed		Japan	Remarks
	Vernacular	Anglo Vernacular	Vernacular	Anglo Vernacular		
Religion and morals	2½	2	2	2	2	The optional subjects in Japan are—
Mother tongue or first language	10½	10½	8	8	8	1 Agriculture 2 Commerce 3 English In Mysore—
Arithmetic } English or Vernacular	5	4	5	4	4	1 Agriculture 2 Mensuration 3 Sanskrit etc
History and Geography	5	3	3	3	3	But in Industrial Schools of the Elementary type instead of manual training industries with practical work are taught
Hygiene or Science	2	1	1	1½	2	In the general Education School Japan gives Manual training and Agricultural instruction No other industries are taught
Optional subjects or language	2½	4	3	3	4	
Drawing			2	2	2	
Gymnastics and drill				½	3	
Manual training		2		2	2	Should be devoted to gymnastics and School gardening if no industrial work be done
Industrial training			6	4		
Total	27½	27½	30	30	30	

In the third year of the three year course of the pu nglo Vernacular and Vernacular schools

English	9 hours	Materials and their sources and uses	1 hour
Drawin	2 do	Industrial Training	18 hours
		Total	30 hours

Inasmuch as the additional 2½ hours of work comes in only as physical exercise or recreation work it will be no strain So the boys are expected to work for six days in the week at five hours each

The minor changes of a similar nature in the Time tables of the II and III Anglo Vernacular classes do not need to be pointed out here

For the special industrial course for boys that attend only the trade class or practical work class no special hours need be fixed

Industries to be taught and centres—For reasons assigned in Part I twenty centres may be opened the first year and the number multiplied subsequently as experience is gained Only one industry should be taught at the beginning in each school But carpentry and blacksmithing or rope making and mat weaving or bamboo and rattan work should be treated as one industry

The industries recommended for the present are —

A For Vernacular Schools—

1 Agriculture
2 Weaving (cotton and silk or wool)
3 Bamboo or rattan work
4 Pottery
5 Rope making and mat weaving (with rushes as well as coir)
6 Sericulture
7 Shoe making
8 Agriculture

B For Anglo Vernacular Schools—

1 Gardening and Agriculture
2 Carpentry and Blacksmithing
3 Wood turning and Toys making
4 Metal work
5 Book binding
6 Dyeing
7 Tailoring
8 Book keeping and commercial correspondence (Indian and English systems) If the committee approves of this

The twenty centres should be chosen one or two for each district except Mysore and Bangalore which may have more The schools situated in places having the largest population of the particular Industry proposed to be taught should be selected at the first trial

Mysore —1 Silk weaving 2 Carpentry 3 Metal work and 4 Agriculture
Bangalore —1 Tailoring 2 Shoe making 3 Dyeing and 4 Book binding
Kolar —1 Sericulture and 2 Agriculture
Tumkur —1 Rope and mat making 2 Carpentry and Black smithing
Hassan —1 Metal work and 2 Agriculture
Kadur —1 Pottery and 2 Basket and mat making
Chitaldrug —1 Weaving (silk or wool) and 2 Agriculture
Shimoga —1 Sandal and other wood work 2 Agriculture

Seeing that the first impression produced is a very important factor I should strongly advocate the starting of such instruction as far as possible in the District Headquarters where some intelligent supervision and direction is possible For carpentry and blacksmithing particularly District Headquarters seem to possess special advantages Further people from all the parts of the district would meet there and spread a knowledge of the usefulness of instruction easily In the case of district capitals two industries may be taught in each school

Teachers—A special and separate teacher should be appointed for each school Sometimes the same master can teach two closely allied industries such as carpentry and blacksmithing bamboo and rattan work Further the special teacher can give the requisite instruction in Drawing for the whole school So twenty experts that is men that have not only passed from the Bombay Madras or other technical schools but also worked for a time in some farm garden workshop or firm should be appointed on three or five years probation Confirmation or promotion should be dependent upon their satisfying the controlling authorities that the trades taught are commercially advantageous to pupils in earning a living It is not meant that the school should be made self supporting But the teacher should show taking into consideration the outlay that a pupil will be able to earn the wages of a trained artizan after leaving school

If competent men cannot be found even for these twenty schools such select Mysore students as have a decided taste for industries should be sent to Bombay or Madras and trained Till then only as many schools as competent masters can be found for should start work

The appointment of a teacher should in each case be recommended by a committee of three officers two of whom belonging to the Educational Department and one to the Public Works Department after examining the practical work of the applicant This rule is highly necessary to avoid the mistakes often made in appointing teachers of this class

In the case of teachers for school gardening arrangements must be made for one master from every school in the Province under going a course of training for three months in the Lal Bagh Bangalore under the Curator or the Superintendent

Equipment—To begin with the number of boys learning any industry in a school should be limited to twelve or if more seek instruction they may be divided into batches of twelve or less In some cases to fit up even on the smallest scale a work shop for instance of carpentry for a dozen pupils will require a large sum And a single teacher cannot attend to a larger number when they are at practical work

The school buildings are generally too small to provide accommodation for the workshop separate but small house near the school must be rented As for Agriculture a demonstration farm being the first requisite some two acres of wet or garden land should be attached to the school Bulls need not be purchased They may be hired whenever the need arises. A few tools and implements have to be bought

As for Manual Training which is the chief Practical Training that the boys of the primary grades can get it is necessary to provide facilities as liberally as Government can School gardening deserves special attention

(1) In every school of the Lower or Upper or Middle grade that has convenience for watering the land for purposes of cultivation a school garden should be started An acre or two of land should be given to the school

Where watering facilities do not exist the teachers may be asked to teach some practical garden work during the rains only The school compound if it has any if not a plot of uncultivated public land near the village may be permitted to be used during the season

(2) The Superintendent of the Lal Bagh Bangalore should keep in stock a good supply of seeds and plants and distribute them gratis to schools when required and recommended by the Circle Inspectors scholarships It is absolutely necessary to give scholarships (1) to those boys that have the Primary schools and go to the centres with schools teaching industries and (2) to those that continue for a year after passing the Vernacular Lower Secondary Examination They should be tenable for two or three years in the former case and one year in the latter

As they will have to maintain themselves Rs 6 in the case of those that come from places other than that in which the school is situated and Rs 3 in the case of the natives of the place may be given

Cost —As for the cost of fitting up the workshops for carpentry smithy bamboo or rattan work weaving metal work etc and for providing the necessary tools and implements for agriculture for a dozen pupils in each case I am not in possession of full information yet I shall submit a Supplementary note on this point later on

Tumkur V SUBRAHMANYA IYER

APPENDIX B

REPORT ON THE TOUR MADE BY M SHAMA RAO PRESIDENT PRACTICAL INSTRUCTION COMMITTEE IN MAY AND JUNE 1910

THE OBJECT OF THE TOUR

1 While in the case of general education it is possible to formulate a uniform scheme applicable to all or a majority of the schools in a Province it is impossible to do so in the matter of Practical and Industrial instruction however Elementary it may be Every scheme that has for its aim the training of children for later practical and industrial life must take into consideration the local economic industrial and social conditions which naturally vary in different places The pupils must ordinarily be given an education that would enable them to thrive in the environment that the industrial economic and social conditions of the locality may determine or may have determined for them.

2 With a view therefore to ascertaining how far the local conditions in the Province would favour the introduction of any of the proposed schemes what the existing situation actually requires and how far the experiments hitherto made in giving Industrial instruction in some places was a success I was deputed to visit one or two typical centres in each of the eight districts of the Province

THE PLACES VISITED

3 The following centres were selected —

1 Chiknayakanhalli (Tumkur)
2 Davangere (Chitaldrug)
3 Agumbe } (Shimoga)
4 Sagar }
5 Mudgere (Kadur)
6 Hole Narsipur (Hassan)
7 Sravanabelagola (Hassan)
8 Hunsur } (Mysore)
9 Nagamangala }
10 Magadi } (Bangalore)
11 Dodballapur }
12 Kolar (Kolar)

4 Further all such places of educational and industrial interest on the way to and from the centres as well as near them were also permitted to be taken As my summer vacation was however over by the time I finished four districts I could not complete the work assigned to me

5 The place visited are

1 Chiknayakanhalli
2 Davangere
3 Harihar
4 Mayakonda
5 Tudurghatta
6 Tirthahalli
7 Magervalli
8 Nalur
9 Agumbe
10 Malur
11 Shimoga
12 Ayanur
13 Sagar
14 Tarikere
15 Mudgere
16 Sondekoppa
17 Makanhalli
18 Ghattadahalli
19 Nandipur
20 Bedarhalli
21 Halekote
22 Phalguni

6 Whenever I went I visited the general education schools the village elementary or Anglo Vernacular Taluk Schools Industrial schools if any and Industrial workshops or factories I also held conferences with the leading representatives of the industries and other intelligent public citizens

ABSTRACT OF MY DIARY AND OBSERVATIONS

1 *Weaving* —One of the most important industries proposed by Government as a subject for practical instruction is weaving Places like Chiknayakanhalli Davan ere Harihar and others were visited as they contained either an industrial school or a large weavin population Tl ough Chiknayakanhalli has both these elements yet (1) not a single pupil of either the kun bli making or the cotton and silk weaving community of that town has sought admission to the local industrial school though it is seven years since it was started (2) of the mendicant waifs and strays of other communities and places that have gone to the Chiknayakanhalli school solely for the sake of the scholarships not one has till now been able to reach even the lowest of the technical standards of weaving so as to be able to earn a livin (3) not one that has been a pupil in it has till now started life independently

So much for the Industrial School

2 The weaving and the Kurubar Communities do not allow their children to attend even the General Education Schools after the eleventh or twelfth year of age In this respect Davangere and Harihar resemble Chiknayakanhalli

3 A conference with the leadin men parents and tradesmen in these three centres revealed the followin —

(1) These communities do not wish to give their boys any school instruction in weavin as tl e tra le is not a paying one The wages of the workmen have gone down considerably They say they are not able to make the two en ls meet Thou h the money value of their wages now be very nearly the same as before yet the food purchasing value of it is only half of what it was some 15 or 20 years a o In some cases even the money value has gone down

(2) They hold that the industrial or practical instruction given in such schools will not improve tl eir condition For the improved metl ods such as the fly shuttle weavin are not of much use in makin fabrics such as *sadies* which are in demand in the local markets Hand made checks and other cloths are not able to compete with the imported foreign articles inasmuch as the *margin* of profit left to the workman is too small for him to live upon Checks are a cheap stuff and only a very small profit can be made per yard Unless therefore the methods taugl t be such as would ensure the pupils earning more than they do at present the parents declare that they will refuse to send their children to schools teachin the industries

(3) Some of the poor parents say that they would allow their children to attend any school provided they are iven a decent stipend and only as long as they are given it For they believe that by makin the children work at home they could not only give them the best trainin in their trade but also help them to earn some wages Sendin the boys to a public school means a real loss to the parents

(4) It must be noted that there is a gradual decline not only in the population but also in the trade of these communities

Many Kurubars are giving up kumbli weaving for agriculture The other weavers are also eager to change their occupation

(5) Eleven years is about the a e at which the parents withdraw their children from school as it is at tl at age that they can render useful service at home and also learn their trade earnin at the same time some small wages for the family

4 Now inasmuch as no trade can be tau l t before a boy is at least eleven years of age no practical instruction scheme that would enable a pupil to earn his living can work unless Government can keep the boys of these communities by compulsion in schools till they are about fourteen years old and unless Government can make the learning of the weaving industry compulsory If the object of the scheme be however *not* to enable boys *to earn a living* but only to train the hand and the eye by means of Manual Instruction as much of this kind of practical instruction as has been laid down in the Manual Instruction Scheme of Mr Bhabha may be introduced But I must clearly point out that in the opinion of some of the latest Educational Authorities mere Manual Trainin is of doubtful utility *as a means of earning livelihood* in a country where machinery is not largely used for industrial purposes and where industrial organization is still in the infant stage

5 The circumstances militating against the development of the Kumbli Industry are various and they are of an economic nature So I will not enter into them here

6 At present the only safe and possible course to be adopted appears to be the following —

(1) To make an *experiment* only at places where Government have established Industrial Schools with a weaving establishment

(2) To so arrange the work of the A V Schools in such places as to make it possible for the pupils to attend the Industrial School for an hour a day in the afternoon

(3) To induce as many pupils of above eleven years of age as possible to o to the Industrial School To attach a weavin establishment to any other general school seems to me to be undesirable at this stage After experience is gained in these few centres the scheme may be extended In this connection I would however specially brin to your notice the facts that Panchamas are eager to learn fly shuttle weaving And I learnt at Harihar that the cloth required by the Panchama community could be chiefly made by any foreign loom It may be introduced into Panchama Schools The initial cost may be Rs 100 for two small looms

1 *Carpentry* —This handicraft appears to have a more hopeful future from an educational point of view though at the Chiknayakanhalli school the pupils say that they have joined the school with

view to getting employment in Government service and not with a view to earning their livelihood independently It is true as they say that there is no demand for the sort of work they learn in the Industrial Schools and that for the sort of work needed in the villages there are already men enough children can learn so much of the trade without going to any such school Nevertheless at places like Tirthahalli and Sagar there is a considerable demand for carpenters It is reported that hundreds of wood workers come into these taluks from North and South Canara and from Goa every year and make a living Further the abundance of raw material in the neighbourhood is another inducement to many to learn this trade

2 In select places like Tarikere Tirthahalli and Sagar carpentry may be easily and profitably taught in the A V Schools For it is in the A V Schools alone that we find a sufficiently large number of pupils of and above eleven years of age

3 What makes the teaching of carpentry feasible is the circumstance that all castes irrespective of all social ranks are willing to learn it if not as a means of earning one s livelihood at least as a pleasant manual exercise I found at Sagar and Chiknayakanahalli all the pupil castes of Hindus and Mahomedans and Christians learning it It will be further noted that the age difficulty does not affect the teaching of this handicraft in schools There will be a sufficiently large number of pupils of all castes in the A V Schools and in the higher classes of the village Lower Secondary Schools ready to go in for it Only Primary Schools cannot have it The initial cost of purchasing tools will be about Rs 120 0 0 for a dozen pupils The house rent and the Maistry s salary and contingent expenses will be about Rs 25 0 0 to Rs 50 0 0 a month No additional or special expenditure need be incurred at places having Industrial Schools

4 The Industrial School teachers at the places I visited unanimously held that if the Industrial School Curricula and the General School Curricula be combined and co ordinated the carpentry class would flourish exceedingly well

1 *Blacksmithing* —Taking the local conditions into consideration it has to be pointed out that excepting in cities like Bangalore and Mysore blacksmithing cannot be taught as an independent subject It is not possible to get a sufficiently large number of pupils for a class in any centre Wherever there is a large Mahomedan population grown up boys of over ten years of age seem to be desirous of learning this handicraft But they have no idea as to whether it will be to enable them to earn a living And enquiries go to show that the prospects are not very bright owing to foreign competition

2 The best course therefore appears to be a combined carpentry with blacksmithing The two may be taught together for the present Two sets of tools of about Rs 50 0 0 each will be required for a dozen pupils

1 *Bamboo work* —This is gradually dying out Very few children of the Medar or the Korama caste who generally make bamboo articles are to be found in any school either at Shimoga or at Tarikere This occupation is not sufficiently paying nowadays The basket makers are trying to earn their livelihood either as coolies or as agriculturists The causes that have lead to the decline of this trade are many which need not be gone into here The parents are therefore *not* willing to send their children to school unless some assurance is given that their boys will be helped to earn a living

2 The handicraft may however be taught as an additional subject along with agriculture. Children of all castes would like to learn it

But this trade will have a bright future and many will send their children to the general as well as the Industrial classes if an expert from Japan could be got out to teach them to make articles that would find a ready and profitable market At present the tools required for making ordinary articles would cost about Rs 2 12 0 a pupil or about Rs 30 0 0 for a dozen pupils

1 *Rattan cane work* —Agumbi is the only place where cane work was to some extent being carried on But the extent to which it has now declined can be realised when it is pointed out that there is now only one man that is doing that business And even he does not make it a means of living If a *competent* teacher could be appointed on Rs 20 0 0 or Rs 25 0 0 a month, all the boys of above eleven years old in the Agumbi school and at Natui will readily like to Cane work The parents of all castes are eager to get their children taught This handicraft can be made very lucrative if only competent teachers be sent An hour s work a day is enough for two or three years The abundance of raw material in the neighbourhood of these places is a great advantage The subject can be easily made a part of the school curriculum

2 Tools of the value of about annas 12 per pupil and a recurring charge of about annas 6 a month per head is all that is required

1 *Shoe making* —Enquiries at Tarikere and at Chiknayakanhalli showed that sons of shoe makers hardly attend any school There is however a good field for this trade in the rural parts And if boys could be taught to make shoes of improved patterns also there is no doubt that a living could be easily earned The boys have first to be kept in the school after they are ten or eleven years old A two or three years course is needed for them

2 The Madigas however wish to learn Sandal making This may be taught in the Panchama Schools A one year s course is enough

3 For teaching shoemaking tools worth about Rs 10 0 0 will be required for a set of four boys or Rs 30 0 0 for twelve For sandal making Rs 3 0 0 will suffice for tools for half a dozen pupils Both these trades can be taught in select places only

4 *Pottery* —Of the centres I visited the only place that contained a fair number of pot makers was Tarikere Their children are not found in any school there They may be induced to send their children to school and also to learn pot making But they say that they would not care to send the children to school unless their boys are taught something better than what they know already For.

they say they can teach their children themselves the trade better and that *with profit* to themselves A specialist must be employed as teacher otherwise boys will not come Further enquiry is necessary as regards the initial cost and recurring charges of a pottery class

1 *Coir rope and mat making* —Enquiries made at Chiknayakanhalli one of the chief centres of cocoanut plantations were not encouraging The local coir is they say unfit for making ropes and mats I actually saw large quantities of it imported from Calicut and other places on the West Coast of India To render local coir useful for such purposes it requires some technical knowledge The subject deserves investigation The making of rough ropes and mats however be taught along with agriculture

1 *Honey making* —One of the most lucrative industries that could be developed in Mysore is honey making And at present it is not one of those industries that are suffering from foreign competition

2 Agriculture is regularly taught in rural schools in civilized countries like England France and the United States It is being introduced into Ceylon In Mysore it can be easily made a school subject It may be taught either independently or along with agriculture

3 It is now pursued by boys of eleven to sixteen in the malnads particularly of Mudgere and Saklespur It will be a very interesting subject not only for malnad schools but also for places like Bangalore which have many climate facilities for developing this industry

4 School boys have to be engaged with it only six months in the year From the middle of June to the middle of December there is little to do That interval may be utilised in teaching the boys the natural history of these It may also be made an adjunct to Horticulture or gardening A two years course will suffice

5 No special training of the teachers is required The general school teacher can easily pick up the elements of Bee keeping and teach the subject

6 That honey making is a most profitable industry may be easily gathered from a reference to such authoritative writers as Mr Root the American Author At Mudgere I found that about 150 maunds of it was being exported every season

7 All castes may learn the industry either for pleasure or for profit

8 All the initial outlay that it will require is a rupee s worth of pots and a few annas worth of wax I shall not here go into the climatic and other conditions that the places selected for teaching it should fulfil

1 *Agriculture* —The subject which can be taught in a majority of the schools and the subject that is eagerly sought for by many parents in the rural districts is agriculture Almost the whole of the strength the Taluk and Village Schools consists the children of agriculturists or landholders Further it is only here and there that we find facilities for schools for other industries

2 Schools for agriculture may be opened in almost every village that has a decent school going population The special agricultural subject taught in each school must vary with local conditions So this was reserved for a special study at the end of the tour after acquainting myself with the peculiarities of all the districts

3 I will not therefore go into details here I will only add that wherever I went the teachers and parents with one voice said that a teacher that knows no more than the ordinary ryot cannot succeed in making agricultural study interesting The teachers must therefore have some special training

4 If the teacher be an energetic and tactful person he can easily get sufficient help from the ryot themselves

However a demonstration farm must have —

2 or 3 acres of land	
6 Country ploughs	Rs 12
1 English plough	Rs 30
1 Level board	
3 Kuntes	
6 Hand hoes	Rs 27
6 Pronged hoes	
6 Thalikes Kurpes etc	

5 Contingent charges will vary according to the value of the crops grown for demonstration

To sum up —The chief difficulty in the way of practical industrial instruction in Elementary schools *in the four districts I have seen* is that pupils of many of the handicraft communities do not keep on in the schools after they are eleven years old And no industrial instruction is possible before that age as has been pointed out under Weaving In the cases of these handicraft classes Education must therefore be made compulsory till the boys are fourteen

In the case of agriculture carpentry and rattan work no compulsion is necessary All that is required is only to make such industrial instruction a part of the general school curriculum

The other subjects that could be taught and the conditions favourable or otherwise in the remaining four districts have not been touched upon as I have had no time to complete the tour My inferences I have to add may have to be modified in the light of the conditions obtaining in the other districts

Before concluding this short report of my tour I feel bound to record my great indebtedness to the Revenue authorities and the Educational Officers of the four districts I travelled in for the valuable assistance they gave me in making my enquiries

I have the honor to be
Sir
Your most obedient servant
V SUBRAHMANYA IYER
Secretary
Practical Instruction Committee

APPENDIX C

A NOTE ON THE DRAFT REPORT OF THE PRACTICAL INSTRUCTION COMMITTEE CIRCULATED FOR OPINION AMONG THE MEMBERS

The object of Government in bringing the Committee into existence judging from the Government Order No 2640 8—Edn 224 09 3 of 16 9 1910 is as follows —

(1) To elicit the drawbacks of the present system of teaching in Elementary Schools
(2) To provide measures for their remedy
(3) To provide a scheme revising the present curriculum of studies and providing Practical Instruction

2 Of the three objects enumerated only the third namely the revision of the curriculum of studies forms the subject of the Draft Report The first two objects are completely ignored The attention of the Committee is respectfully invited to a consideration of those two objects as being of the highest importance A careful and exhaustive inquiry into the drawbacks of the present system of teaching and their remedies is of the most pressing importance but as this subject is not touched upon in the Draft Report no reference will be made to it in this note

3 Before proceeding to an examination of the revised scheme of curriculum embodied in the Draft Report the attention of the Committee is respectfully invited to a consideration of the feasibility of introducing utilitarian Industrial Education as distinct from mere manual education into schools of general Elementary Instruction In this connection the following points deserve consideration –

(*a*) The ages of pupils of elementary schools even in the IV and V standards are fixed at 9 10 and 10 11 years respectively (*Vide* Mysore Educational Rules Part I page 5) At such a tender age much cannot be hoped to be accomplished in the way of imparting Industrial Education If it is said that these ages have reference only to ideal conditions and that the actual ages are higher than those given in the rules it must be remembered that courses of instruction are designed to suit particular ages and that without the necessary conditions being fulfilled with respect to age several courses of study like kindergarten Nature study and sloyd become inappropriate as is actually the case in many schools

(*b*) If the duty of providing Industrial Education is to be undertaken by the State with profit to the country care should be taken to see that such education is remunerative proportionately to the expenditure of time and money involved in it The history of Industrial Education in many places reveals the creation of a class of workmen for whom there is no demand and who have found themselves in consequence obliged to abandon the industry in which they have received training in favour of some other calling In the present state of industries in this country extreme care is necessary to find out which of them are likely to prosper and which not A minute industrial survey of the country and expert opinion as to the future of each industry native or foreign are necessary before Industrial Education can be seriously discussed The responsibility of the State would be far greater should it proceed to make any Industrial Education compulsory without such preliminary inquiry

(*c*) It is hopeless to create an era of industrialism in this country by the mere spread of Industrial Education without the creation of flourishing industries and the spread of modern ideas among the masses It is well known that capital in this country is as a rule shy of investment in industrial undertakings The present trend of vernacular publications shows that it will be long before any vernacular can come to boast of a literature on the modern side or become available for the spread of modern ideas

(*d*) Industrial Education undertaken by the State is not likely to be as economical or as much in keeping with real conditions of business as similar education imparted in private factories to apprentices employed by them in the ordinary course of the business of manufacture Industrial Education in Government schools has a tendency to become theoretical as well as uneconomical

4 Turning now to the revised curriculum as shown in the Draft Report it may be profitable to go over the paragraphs one by one and to note down such remarks as may appear to be called for

Proposals contained in the Draft Report	Remarks
I COURSES OF INSTRUCTION	
(1) The Kannada Lower Secondary course is extended by two years and Industrial Education is made compulsory	As at present constituted the course of study culminating the Kannada Lower Secondary Examination is expected theoritically to extend from the 5th to the 11th year (*Vide* Mysore Educational Rules Part I page 5) But actually it extends on an average from the 8th to the 15th year The proposed addition to the course would extend it theoritically to the 13th year and actually on an average up to the 17 This considering the qualifications to be attained appears to be a highly undesirable waste of time and energy

(2) The bifurcation into English Education on the one hand and combined Vernacular and Industrial Education on the other commences when the IV Standard is reached

The average age of pupils joining the IV standard is theoritically assumed to be 9 years in the Educational Rules Granting that the ages therein given are suited for realising best results from the proposed courses of instruction it is to be noted that a child of the age of 9 years is not capable of entering upon any utilitarian Industrial Education or even to handle the tools for such education

(3) The hours of work allotted to the differ ent subjects are as follows —

Religious and moral per week	
Instruction	2½ hours
Mother tongue	7 hours
Arithmetic	4 hours
History and Geography	2 hours
Science Subjects	2 hours
Addl Subjects	2 hours
Drawing	2 hours
Industrial Training	6 hours

(3 afternoon lessons of 2 hours each)

To any one acquainted with the practical difficulties of teaching it will be obvious that the time allotted to the study of each subject is wholly inadequate Regard being had to the various branches of study and exercises that go to make up a single subject such as mother tongue or History or Geography the allotment now proposed amounts to hardly more than one hour per week for every branch of a subject or for each kind of exercise and this is utterly inadequate That the whole course of study from the IV Standard is extended over 4 years instead of 2 years as heretofore is no gain but on the other hand a serious drawback for in the Elementary Stages of instruction work taken up at short intervals is more effective than the same extended over a prolonged period

(4) The Science subjects comprise Hygiene Natural Science or Nature Study and Elemen tary Physiography

The teaching of these subjects in the absence of suitable Text books and capable practical teachers will be attended with the same difficulties that are found in the teaching of a riculture and hygiene at present in the Kannada Elementary Schools A much higher order of teachers and a better class of Text books as well as facilities for practical in struction are necessary for the teaching of these subjects than can be made available in the Elemen tary Schools in near future

(5) The additional subjects comprise (1) Book keeping (2) Domestic Science (3) Ambu lance and (4) Nursing

The remarks in the above para apply equally to these additional subjects The general Elementary teacher even if he is trained in the Normal Schools for the short period of a year will be unable to cope with the science subject and the additional subjects as well as with the Industrial subjects

(6) The same teacher will teach the IV and IV A classes so also the V and V A

Where the number of pupils in the IV and IV A classes together or the V and V A classes to gether is sufficiently large to allow of an option being allowed in the choice of Science additional subjects and industries the difficulty will arise from time to time as to whether the same teacher is to be entrust ed with the teaching of all branches of Science and additional subjects and industries or whether pupils should be compelled to take up one and the same Science additional subject and industry

II PRACTICAL INSTRUCTION

(1) Up to the III standard Kindergarten and Manual Training to be given

If the Kindergarten and Manual Training in the Kannada Elementary Schools in the moffussil are to be anything more than mere names a much higher order of teachers is required higher both in respect of general Education and specialist training than is to be had at the present day

(2) The object of the Committee is that the Industrial Education imparted should be such enable the pupils to earn their living

It is of the highest importance that there should be a reasonable certainty of all the pupils earning a decent livelihood each according to his station of life For this purpose the rate of wages for each industry in a locality the number of wage earners and the prospects of supply and demand of each industry for some years to come should be ascertained with a fair degree of approximation before the teaching of such industries whether volun tary or compulsory can be taken in hand

(3) Group A includes (*a*) Agriculture (*b*) Gardening (*c*) Dairying (*d*) Apiculture (*e*) Ani mal Production

The teaching of Agriculture in General Schools has been tried in Bengal and abandoned as being a failure The result of grouping so many subjects together will be that none of these subjects will

	be taught satisfactorily with sufficient attention to the details of processes One industry well learnt will repay better than ten imperfectly learnt The same remark applies to many other groupes such as C F N and P
(4) Group B comprises sericulture and eri silk production	Experiments in Sericultural farming in Bengal have not been successful and the success of the Bangalore Silk farm is also yet to be proved Seri cultural teaching in places where it has been started in Government Schools as in Channapatna and Closepeet has suffered as much from the apathy of teachers and pupils as from the lack of funds for purchasing mulberry leaves or necessary tools and useful articles the contingent amount sanctioned for the purpose being insufficient
(5) Group C	Not likely to repay sufficiently for livelihood
(6) Group D includes carpentry and black smithing	Two very different industries requiring al together different sets of conditions
(7) Group E comprises brass and copper work and bell metal casting	With the great and increasing use of glass and enamelled iron ware in place of brass copper and bell metal utensils and other articles such as lamps cups saucers plates dishes etc This industry is likely to become less and less profitable as time goes on unless improved methods and improved patterns are adopted For this expert training is necessary The brass industry of Magadi has been steadily deteriorating several manufacturers having abandoned the calling and taken up petty trading by preference
(8) Group F	Not likely to repay with livelihood any con siderable number of pupils in a locality
(9) Group H weaving and dyeing	Even the Weaving School of Dodballapura with its expenditure of about Rs 60 per pupil has not been able to set up many of its pupils indepen dently working with improved methods None of its pupils has adopted the fly shuttle loom or shown better work in practice than the home educated artizans One pupil of the weaving caste who had passed the Kanarese Lower Secondary Examination was deputed from Dommasandra to learn weaving in the Dodballapur Industrial School on a scholar ship of Rs 7 per mensem and completed the course of study but afterwards expressed his willingness to enter Government Service on Rs 10 per mensem in any capacity rather than work in the profession
(10) Group I Tailoring and dress making	The demand for this in moffusil places is very limited
(11) Group J shoe making cobling and tanning	Religious and social objections will prevent the adoption of these industries by any but the lowest class of Panchamas in moffusil places, whatever the case may be in large cities
(12) Group M tin smithing and Wire goods making	Costly machinery will be required for wire goods making and the demand for such goods is problematical
(13) Group N horn articles etc	It may be possible to make interesting curios out of some of these materials such as hookah bulbs cups etc but the demand is very limited For production on a large scale costly machinery and improved methods taught by expert teachers are required
(14) Group O needlework and embroidery	The above remark also apply to embroidery in this group In the Channapatna Mission Industrial School for women these occupations were tried and found to be not sufficiently paying
(15) Group P cookery syrup making etc	Distilling essential oils is a very different in dustry from others and requires different conditions

III TEACHERS

(1) Literary teachers to give industrial education.	Such teaching is likely to be altogether un satisfactory

(2) Teachers to be trained by deputations vacation courses and study in Normal Schools

(3) Expert crafts men to be employed occasionally to teach

Such training is likely to be very insufficient

If the indigenous industries are taught according to old methods only they will not enable any large number of pupils to earn their livelihood under the present conditions of a steadily decreasing demand for their productions

5 *Conclusion*—If it is deemed necessary to impart Industrial Education to pupils of Elementary Schools it would be better to open independent rural Industrial Schools manned by teachers instructed in improved methods in respect of each industry the supply of such teachers being insured by a permanent system of scholarships or by the establishment of a Central Training School To mix up Industrial Manual and Elementary Education taught by the same masters in one and the same Elementary School would lead to loss of efficiency in each of these branches A Village Elementary School teacher who will be equally successful as an instructor in Literary Manual and Industrial subjects would be a miracle such as we have no right to expect within the present generation

The great need of the times appears to be (1) the improvement of the existing schools both general and industrial so as to make them really efficient (2) the starting of such new modern industries as are likely to meet a real demand in the market by private capitalists such industries being fostered if necessary by State aid (3) the gradual multiplication of really efficient Industrial Schools teaching such new industries at suitable centres (4) the establishment of a judicious interconnection between various stages between the Literary courses in general schools and the Industrial and Technical courses in Industrial schools and Technical Colleges such as we find established in the educational system of Japan Without an increase in new and flourishing industries, Industrial Education whether in the old or in the new methods would only flood the market with skilled industrial labour and create new difficulties If as is too well known in this country capital is shy of investment in industrial undertakings it follows that Industrial Education has no right to be in advance and if it does go in advance it will be so much the worse for the labourers Market first capital next and labour last would appear to be a sound maxim for industrial progress Industrial education should follow and not precede the creation of industries based on a real demand for the commodities and vitalized by the free influx of capital

B DASAPPA

Deputy Inspector of Schools Bangalore District

GRS 26]

File No

Serial No 12

Diary No of letter replied to 5767

General and Revenue Secretariat
( )
the 19

Date of issue 21 3 12

Signed by

20/3 No. 6823
Edn 224 09 -
Email sent on 23 3 12 . 9 21 3 12

To

The Director, Govt. Press

Sir,

I am directed to forward herewith ~~copy~~ the Report of the Committee appointed for considering and preparing a scheme for practical instruction in Elementary Schools and to request that you will be so good as to ~~cause get 100 copies~~ have

over

SUBJECT

printed and ~~sent~~ 200 copies sent to the office at a very early date

I have c/u
[illegible] 18/8/12
For [illegible]

[illegible] 18/8/12

List of enclosures,

Copied by

Examined by [illegible] 18/8/13

G. L.—10 000—9 10

2

Office of the President of the
Practical Instruction Committee

Dated, Turkur, 22nd March 1912

From

President of the Practical Instruction Committee

To

C S Balasundaram Iyer Esq B A
Offg Secretary to the Government of
His Highness the Maharaja of Mysore,
General and Revenue Departments,
BANGALORE

Sir,

In continuation of my letter No C 41 dated the 1st instant forwarded through the Inspector-General of Education in Mysore, I have the honor to submit herewith the duplicate copy of the last page of the report signed by all the members of the committee

I have the honor to be,
Sir,
Your most obedient servant,

PRESIDENT

Vgr/23

5187 From The President of the
Practical Instruction Committ

To The Secretary to the Govt of Mysor
General & Revenue Departments,
B A N G A L O R E

Dated 22nd March 1912
Despatched ----dc----
Received
General No 431
No

Enclosure No. One

Submits the duplicate copy o
the last page of the Report signe
by all the members of the committ

2/26

File No 2

Serial No 14

GRS 26]

Diary No of letter replied to 5319

General and Revenue Secretariat
(Edu)
the 19

Date of issue

Signed by MrBBR

Cent
No 7123
Edn 224-09-
8303

To The Sritt Civil Pren

Sir,

In continuation of this office no 6823/Edu 224-09-12 & 21st March 1912 forwarding the Report of the Committee appointed to consider and prepare a Scheme for providing practical instruction in elementary Schools and requesting that 200 copies of it may be ~~sent~~ printed and forwarded early, I am directed to forward send herewith the

over

SUBJECT

last page of the Report signed by all the members, which may be substituted for the last page inadvertently sent.

I am also to request that the printed copies may be forwarded to this office along with the original as early as possible ~~not later than the 1st of April 1912~~

I have etc.

29 3 12

for Secy

8/p
29 3 12 -126

List of enclosures,

Copied by

Examined by

JM 31/3

GPB—10 000—28 2 11

278.

GRS 2-

File No 224
Serial No 15

Diary No of letter replied to

No 7412
Edn 224-09-
06 4 12

General and Revenue Secretariat
( )
the 19

To The Supdt Govt Press

Has the honour to invite his attention to the office letters nos 6823/Edn 224-09-12 & 7123/Edn 224-14 of 21st & 30th March 1912 respectively and to ~~request~~ state the printed copies of the Reports called for ~~may be sent to this office at once~~ are urgently required. He may be so good as to inform when they may be expected to reach this office.

By order

For Sec

Date of issue 6-4-12

Signed by

6 4 12

over

SUBJECT

6/4/12
6/4/12

List of enclosures,

Copied by

Examined by

GPB—20,000—26 9 10

229

No 1323
Secret

OFFICE OF THE SUPERINTENDENT
GOVERNMENT PRESS

Dated Bangalore 8th April 1912
DIARY No 5243

1009	010
[illegible]	Edn
FILE NO	224
[illegible]	16

FROM

C H YATES Esq
SUPERINTENDENT GOVERNMENT PRESS
BANGALORE

To

G S Balasundaram Iyer Esq B A,
Offg Secretary to Government
General and Revenue Depts

SIR

In reply to your docket No 7412 Edn 224-8 dated 6th April 1912, I have the honour to state that proof of some of the first portion of Report will be sent in a few days The work being very bulky it is not possible to put the whole of it in type at once, as we have not sufficient type to do so The way to facilitate the work will be to pass proofs a few pages

280 time, in order to get return
type

I have the honor to be,
Sir,
Your most obedient Servant,
[illegible]
Superintendent,
Government Press

Immediate

281

File No 224

Serial No 17

G R S 26]

Sno 89/11

Diary No of letter replied to

No 7592

General and Revenue Secretariat
( )
the 19

~~To~~

Dear Sir

Please refer to this office docket no. 7412/Edn 224-09—15 of the 6th April 1912, requesting early forwarding of printed copies of the ~~proof~~ Report on practical instruction.

A meeting of the committee is fixed for the 15th of this month, and printed copies of the Report are urgently required for distribution to the members thereof. ~~If you could~~ Can you kindly

over

Date of issue 13-4-12

Signed by Mr K M

SUBJECT

arrange to have a few ~~the~~ copies sent at least be given to ~~within the~~ morrow afternoon

~~H^{is} instant, I shall be much obliged~~

It does not matter even if they are proofs and require ~~correct further~~ correction correction from copy by the Asst Secy

Yours sincerely

JKW

for secy.

H Gale, Esq

Sulett Govt Press

List of enclosures,

Copied by

Examined by

JN/18/4/12

GPB—20 000—25 J 10

783

File No 2240

Serial No 18

GRS 261

5843

Diary No of letter replied to

No 9659
Eon rec-09
9/8/12

General and Revenue Secretariat
(Eon)
, the 19

To The Secy to the Eon Committee of the Economic Conference

Sir,

It is understood that the scheme of providing basic institution rural schools is under the consideration of the Eon Committee. Govt would like to have the views of the Committee on the matter at the early date.

I have etc

for 15/6/12

for

Date of issue 14.6.12

Signed by

8/9 -126
15-6-12

over

SUBJECT

List of enclosures,

Copied by

Examined by

GPB—20 000—2 3 10

OFFICE OF THE MYSORE ECONOMIC CONFERENCE

No. 116

Bangalore, — October 8, — 1912.

FROM

C. KRISHNA RAU, ESQ., B.A.,

SECRETARY

EDUCATION COMMITTEE

DIARY No. 2201

19/9/10

SECTION Edu

FILE No. 224

ITEM No. 22

To

K. R. Srinivasa Iyengar, Esq., M.A.,

Offg Secretary to Government,

General and Revenue Departments

Sir

With reference to your letter No 9659/Edn 224-09-18 of the 18th June 1912, I am directed to report that - the following Resolution was passed by the Education Committee in regard to the Report of the Committee on Practical and Literary Instruction in Elementary - - Schools in Mysore at the Committee's meeting held on the 28th ultimo

"That the Committee has gone into the matter and drawn up an able Report and this Committee approves of the general principles on which it has proceeded and of the schemes submitted without committing itself to details of administrative arrangements suggested therein which will have to be disposed of in consultation with the Education Department"

I have the honour to be,

Sir,

Your most obedient servant,

C. Krishna Rau

Secretary

GRS 23]

265

File No 224-09
Serial No 23

Diary No of letter replied to 2207

GENERAL AND REVENUE SECRETARIAT
( )

the 191

Date of issue 9 9 13

Signed by Sir B Ramaswamaiya

Proceedings of the Government of His Highness the Maharaja of Mysore

Expenditure sanctioned to 28

READ— Letter No 5537/Edn 224-09 dt 30th December 1909 to the Inspr Genl of Edn in Mysore forwarding for his remarks and suggestions a ~~Rough~~ Scheme for practical instruction in Elementary Schools

~~ORDER THEREON — No.~~

(Print the ~~Scheme~~ letter in extenso)

2 Letter No 7384/527 dt the 28th January 1910 from the Dgt of Edn in Mysore on the subject

(Print the letter in extenso) over

SUBJECT

Passes orders on the subject of revision the curricula of Elementary Schools and of providing practical instruction in them

G.O. No 2660-8/Edn-224-09 dt the 11th Sept 1910 appointing a Committee for considering the Scheme

(Print the order in extenso)

Memo No 7346/548 dt the 15th March 1912 from the Dept of Edn in Imp forwarding ~~copy of the~~ Report of the Committee

(Here print the Report in extenso)

(The ~~enclosures~~ appendices to the report may be omitted)

5 Correspondence ending with letter No 116 dt the 8th October 1912 from the Secy to the Edn Committee of the Economic Conference Submitting the following Resolution of the Edn Committee on the Report ~~of the Committee appointed for Practical Instruction Commercial Committee for which Reference is to the effect~~

~~That the Committee has~~ ~~into the matter and drawn up an able Report and~~ That the Edn ~~Committee~~ approves of the general principles on which the special committee has proceeded

~~and of the Schemes Submitted without committing itself to the details of administrative arrangements suggested therein which will have to be disposed of by in consultation with the Govt Deptt~~

Order thereon

No 34409 / 20n 22409 — 29 9 13

The Scheme Submitted by the Committee appointed for considering the revision of the Curricula of Elementary Schools and for providing practical instruction in such Schools consists of a large number of recommendations more or less of a general nature. The principles on which the Committee has proceeded are generally approved and the whole Scheme will be referred

to the Govt of India ~~with the~~
for the Recommendations taking action on ~~being brought into action~~ in such
manner as he ~~deems~~ deems suitable due regard being had
~~(having the~~ existing facilities
and resources ~~into consideration~~

2 The rearrangement of the
curricula of studies should be
carried out in accordance
with the recommendations of
the Committee in paras 11 to to
17 of the Report

3 The suggestions made in
paras 6 ~~&~~ to 9 of the Report
regarding the opening of standards
IV, IV A to V & V A in Elementary Schools and the
provision of a Vernacular Course
in some Anglo Vernacular Schools
~~corresponding~~ parallel to the English
Course with a view to give
industrial training to boys
leaving up the Vernacular Course
should be ~~brought~~ carried into ~~force~~ effect
~~into~~ in some selected schools
at first as early as practicable.

The Govt of India is requested to submit suitable proposals in the matter together with an estimate of cost. ~~[So that the necessary provision may be included in the Budget for 1913-14]~~

4 Arrangements should be made in as many Elementary schools as possible to give practical instruction of an elementary character ~~on the lines suggested~~ as recommended in para 10 of the Report. In this connection it would be desirable to have either lessons in ordinary readers or special hand books for the guidance of teachers, compiled in Bermuda. The Govt is requested to take independent action in the matter

5 — Govt will be glad to sanction any suitable proposals for training teachers ~~on the lines suggested in paras 26 to 28 & 30~~ and for the gram

of bonuses to successful teachers of industries on the lines suggested in paras 26 to 28 and 31 of the Report

b. The thanks of Govt are due to Sri Shama Rao and the other members of the Committee for ~~having drawn up a comprehensive scheme on the matter~~ the interesting suggestions report which they have submitted on the subject.

esd 15/3/13

m 15/3/13

The Secy to Govt
Educn Deptt

To the Govt of Educn
Sri President and members
of the Practical Arts Committee
& Secretary to the Economic Conference

Hw 26
14/3/13

Kb 26.8.13

135 Fair draft

Print

1 Copies

B 291

Proceedings of the Government of Hi Highness the Maharaja of Mysore

****

Read ·

Letter No 5537/Fdn 224-09 dated 30th December 1909 to the Inspector General of Education in - Mysore forwarding for his remarks and suggestions, a scheme for practical instruction in Flementary Schools

(Print the ~~letter~~ Scheme in extenso)

2 Letter No 7384/527 dated the 28th January 1910 from the Inspector General of Fducation in Mysore on the subject

(Print the letter in extenso)

3 G O No 2640-8/Edn 224-09 dated the 16th September 1910 appointing a Committee for considering the scheme

(Print the order in extenso)

4 * Memo No 7346/548 dated the 15th March 1912 from the Inspector General of Fducation in Mysore forwarding the report of the Committee

(Here print the Report in extenso)

5. Correspondence ending with letter No 116 dated the 8th October

192

1912 from the Secretary to the Education Committee of the Economic Conference submitting the Resolution of the Education Committee on the report that it approves of the general principles on which the Special Committee has proceeded

-----00000-----

Order thereon No 3440-G
Dated 5m24-09 1913
9/9/13.

The scheme submitted by the Committee appointed for considering the revision of the curricula of Elementary Schools and for providing practical instruction in such schools consists of a large number of recommendations more or less of a general nature The principles on which the Committee has proceeded are generally approved and the whole scheme will be referred to the Inspector General of Education for taking action on the recommendations in such manner as he deems suitable, due regard being had to existing facilities and resources

2 The rearrangement of the curricula of studies should be carried out in accordance with the recommendations of the Committee in paras 11 to 17 of the report

3 The suggestions made in paras 8 and 9 of the report regarding the

e Maharaja of Mysore

o tl e Inspector General of Fduca
ı e for practical instruction in

ı tl e Ir specto General of Lduca

16th September 1910 appointing a

tl e Inspector General of Education

l October 1912 from the Secretary
ti ıg tl e resol tion of tl e Education
ı on wl ich the Special Committee

ı 9TH SI PTEMBLR 1913

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) of the report regarding the open
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rnacular Sc l ools parallel to the
ıl training to boys taking up the
in some selected schools at first as
c f Fducation is requested to submit
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many Elementary Schools as possible
ıy character as recommended in para
uld be desirable to have either lessons
ı the guidance of teachers compiled in
ıuested to tal e needful action in the

ı tion any suitable proposals for training
o successful teachers of industries on the
of the report

e due to Mr Shama Rao and to the other
teresting and suggestive report which they

C S BALASUNDARAM IYER
Secy to Govt Dept of Lducation

ıt or in Mysore
cf the I ı actical Instruction Co ı ı ittee
ıc Conference

Proceedings of the Government of His Highness the Maharaja of Mysore

READ—

Letter No 5037—Edn 224 09 dated 30th December 1909 to the Inspector General of Education in Mysore forwarding for his remarks and suggestions a scheme for practical instruction in Elementary Schools

2 Letter No 7384—597 dated the 28th January 1910 from the Inspector General of Education in Mysore on the subject

3 Government Order No 2640 8—Edn 224 09 dated the 16th September 1910 appointing a Committee for considering the scheme

4 Memo No 7346—548 dated the 15th March 1912 from the Inspector General of Education in Mysore forwarding the report of the Committee

5 Correspondence ending with letter No 116 dated the 8th October 1912 from the Secretary to the Education Committee of the Economic Conference submitting the resolution of the Education Committee on the report that it approves of the general principles on which the Special Committee has proceeded

Printed as accompaniments

No 3440 9—EDN 224 09 23 DATED BANGALORE 9TH SEPTEMBER 1913

ORDER THEREON —The scheme submitted by the Committee appointed for considering the revision of the curricula of Elementary Schools and for providing practical instruction in such schools consists of a large number of recommendations more or less of a general nature The principles on which the Committee has proceeded are generally approved and the whole scheme will be referred to the Inspector General of Education for taking action on the recommendations in such manner as he deems suitable due regard being had to existing facilities and resources

2 The rearrangement of the curricula of studies should be carried out in accordance with the recommendations of the Committee in paras 11 to 17 of the report

3 The suggestions made in paras 6 8 and 9 of the report regarding the opening of Standards IV IV A and V and V A in Elementary Schools and the provision of a Vernacular course in some Anglo Vernacular Schools parallel to the English course with a view to give industrial training to boys taking up the Vernacular course should be carried into effect in some selected schools at first as early as practicable The Inspector General of Education is requested to submit suitable proposals in the matter together with an estimate of cost

4 Arrangements should be made in as many Elementary Schools as possible to give practical instruction of an elementary character as recommended in para 10 of the report In this connection it would be desirable to have either lessons in ordinary readers or special hand books for the guidance of teachers compiled in Kannada The Inspector General is requested to take needful action in the matter

5 Government will be glad to sanction any suitable proposals for training teachers and for the grant of bonuses to successful teachers of industries on the lines suggested in paras 26 to 28 and 31 of the report

6 The thanks of Government are due to Mr Shama Rao and to the other members of the Committee for the interesting and suggestive report which they have submitted on the subject

C S BALASUNDARAM IYER
Secy to Govt, Dept of Education

To—The Inspector General of Education in Mysore
The President and Members of the Practical Instruction Committee
The Secretary to the Economic Conference

Exd —C R

Proceedings of the Government of His Highness the Maharaja of Mysore

READ—

Letter No 5037—Edn 224 09 dated 30th December 1909 to the Inspector General of Education in Mysore forwarding for his remarks and suggestions a scheme for practical instruction in Elementary Schools

2 Letter No 7384—527 dated the 28th January 1910 from the Inspector General of Education in Mysore on the subject

3 Government Order No 2640 8—Edn 224 09 dated the 16th September 1910 appointing a Committee for considering the scheme

4 Memo No 7346—518 dated the 15th March 1912 from the Inspector General of Education in Mysore forwarding the report of the Committee

5 Correspondence ending with letter No 116 dated the 8th October 1912 from the Secretary to the Education Committee of the Economic Conference submitting the resolution of the Education Committee on the report that it approves of the general principles on which the Special Committee has proceeded

Printed as accompaniments

No 3440 9—EDN 224 09 23 DATED BANGALORE 9TH SEPTEMBER 1913

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C S BALASUNDARAM IYER
Secy to Govt Dept of Education

To—The Inspector General of Education in Mysore
The President and Members of the Practical Instruction Committee
The Secretary to the Economic Conference

Proceedings of the Government of His Highness the Maharaja of Mysore,

1

No 5537—Edn 224 09 dated 30th December 1909 to the Inspector General of Education in Mysore

In forwarding herewith a rough scheme for practical instruction in Elementary Schools I am directed to request that you will be so good as to favor Government with your remarks and suggestions at a very early date

Practical Education in Rural Schools

It seems desirable that in the more Elementary Schools practical instruction should be made part of General Education so that the pupils may obtain some qualifications enabling them to turn to some practical walk of life to earn enough to live upon To wait till our primary or lower secondary schools are provided with separate teachers and separate apparatus for practical instruction will it is feared take an indefinitely long period to make any appreciable beginning in the matter

2 Agriculture is carried on in every village and small town in the State in the neighbourhood of the school house In some villages there are carpenters and blacksmiths working It would perhaps be a desirable departure if it can be made a definite part of the school curriculum that the boys should be taken to the fields regularly during the agricultural season and made to learn all the stages of agriculture as it is actually practised around them In the same manner wherever there are facilities boys can be made to learn carpentry and smith s work pottery and wicker work or such other simple trades as can be done by observation and a little practice

3 A few simple hand books (which need not attempt ambitious fullness) may be got up for the help of the teachers whose work should be mainly to take the pupils to the places and set them to work under the guidance of those actually engaged in the work

4 It is not intended that the above scheme should take the place of technical education which should be provided for as far as funds allow gradually in increasing degrees so as to impart much more of improved practical knowledge than can be learnt from the village raiyats and workmen It is only an attempt to show that education from the beginning should have a practical aim and to prove that a smattering of literary education should not make a man unfit or unwilling to turn his hands to any manual work that promises an adequate remuneration

2

No 7384—527 Bangalore dated 28th January 1910 from J Weir Esq M A Inspector General of Education in Mysore to C S Balasundaram Iyer Esq B A Offg Secy to the Govt of His Highness the Maharaja of Mysor Gen and Rev Depts Bangalore

With reference to your letter No 5537—Edn 224 09 dated the 30th December 1909 forwarding a rough scheme for practical instruction in Elementary Schools I have the honor to state that the general idea of training boys in Elementary Village Schools to develop an intelligent interest in agricultural and other practical pursuits is thoroughly sound Of course it is not to be expected that the children will be able to do very much practical work themselves as they leave school so young that their physical powers are not sufficiently developed to fit them for very much useful wage earning work But if the school teachers take them out to the fields or any available workshops once or twice a week and explain to them what is being done it is likely to counteract some of the pernicious influence of purely literary education

The difficulty will be to find teachers who are capable of giving interesting and useful explanations on practical matters for the class of men from whom the village schoolmasters are mostly recruited has not hitherto taken much practical interest in agricultural operations and most of the village schoolmasters probably know little more about such matters than many of the boys who have picked up their information casually from their parents or other relations The scheme however can easily be given a trial in schools where there are schoolmasters who have been trained in agriculture or who have otherwise picked up sufficient knowledge on the subject

I do not think however that the object aimed at is likely to be attained so thoroughly as it would be if primary education in village schools could be based upon nature study in the school garden The efforts of the department to start school gardens in village and other schools have not hitherto been particularly successful and some expenditure has been incurred with little to show for it There are very great difficulties to be encountered want of water want of suitable sites trespassing by men and animals and theft of the produce of the gardens If however these difficulties could be overcome in a few Elementary Schools a marked improvement might be expected in these schools before very long I propose th t Mr Venkatadasappa who is at present working as a supernumerary in this office may be placed on special duty to select suitable schools and start a few school gardens within the allotted amount (Rs 1 000) for the current official year

Correspondence ending with letter No 7384—527 dated the 28th January 1910 from the Inspector General of Education in Mysore regarding a scheme for practical instruction in certain arts and industries in Elementary Schools

3

No 9640 8—Edn 224 09 dated 16th September 1910

ORDER THEREON —Government consider that practical instruction should be made part of the curricula of studies in Elementary Schools so that the pupils may obtain some instruction enabling

Fund (Educa ated 9th Sep mber 1913.

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Mr. M. Shama Rao, (Pr nt)
" B D epu spector of ıools.
" M
" S ls.
" V school.
" C ol.
" K. H ha.
" H. Sr

2. The Comm o h ch e ıes as may be necessary to elicit the drawbacks of the present g in l nt hools and the measures for their remedy and draw up a scheme r cur of s s in these schools wherever it is necessary and providing practi refer o in para 1 and submit the same to Government within three months, if possible, through tl ıspector-General of Education.

4.

REPORT OF THE COMMITTEE ON PRACTICAL AND LITERARY INSTRUCTION IN ELEMENTARY SCHOOLS IN MYSORE.

INTRODUCTION.

Government in their Proceedings No. 2640-8—Edn. 224-09-3, dated Bangalore, 16th September 910, were pleased to make the following order :—

" Government consider that practical instruction should be made part of the curricula of studies in mentary Schools so that the pupils may obtain some instruction enabling them to turn to some pr d walk of life to earn enough to live upon. Such practical instruction should comprise elemen- tr ssons in agriculture, carpentry, pottery, wicker-work or similar simple trades. A Committee co ng of the following gentlemen is appointed to consider the subject :—

Mr. Shama Rao, M A	President.
Mr. B. Dasappa	Deputy Inspector of Schools.
Mr. M. Ramaswamaiya	Do
Mr. S. Rangacharlu	Retired Deputy Inspector of Schools.
Mr. V. Subramanya Iyer	Head Master, Tumkur High School.
Mr. C. Krishna Rao	Head Master, Bangalore High School.
Mr. K. H. Ramiah	General Secretary, Vokkaligara Sangha.
Mr. H. Srinivasa Rao	Assistant Conservator of Forests.

The Committee is requested to hold such enquiries as may be necessary to elicit the drawbacks of the present system of teaching in Elementary Schools and the measures for their remedy, and draw up a scheme revising the present curricula of studies in these schools wherever it is necessary and providing practical instruction as referred to in para 1 and submit the same to Government within three months, if possible, through the Inspector-General of Education "

2. The Committee accordingly held four sittings : first on the 24th October 1910 , next from the 22nd to 24th December 1910 ; again from the 4th to the 9th October 1911 ; and lastly on the 29th and 30th December 1911. At the first meeting it was resolved that each member should submit to the Committee a note containing his views on the subject. The notes of such members as responded to the resolution are found in Appendix A. At the second sitting, the notes were read and discussed at considerable length. But before the third sitting came off, the President, Mr M. Shama Rao, was transferred to Tumkur as Deputy Commissioner. At his suggestion, Mr V. Subramanya Iyer was appointed Secretary and deputed to tour in some of the districts of the State with a view to making further enquiries regarding *local* industrial and educational conditions His report forms Appendix B. At the third session, the Secretary's report was read and the entire subject was traversed in all its important bearings. The present report is on the lines determined by the Committee at this meeting. When the last sitting was held, the draft, which had been previously circulated, was read and passed with the alterations adopted then. Mr B. Dasappa's note on the *Draft Report* forms Appendix C.

3. The investigations made by the Committee chiefly turned upon a consideration of the following drawbacks in the existing Elementary Schools :—

(*a*) The purely literary and theoretical character of the curricula which have failed to meet the requirements in life of the pupils of rural schools.

(*b*) The somewhat antiquated methods of instruction, the unsatisfactoriness of the present system of recruitment of teachers and the inadequacy of the facilities now existing for training them.

(*c*) The unsuitability of some of the manuals and school books.

4 With a view to remedying these defects and engrafting on the literary curricula as much of practical and elementary industrial training as would *ultimately* enable the pupils to turn to some practical walk of life, the following recommendations are made by the Committee.

Proceedings of the Government of His Highness the Maharaja of Mysore,

5 *Courses of instruction* —All such vernacular schools as provide instruction up to any of the standards noted below including the IV A and the V A which addition to the existing course is rendered necessary by the introduction of Industrial Training are to be considered Elementary

The Infant Standard I II III	Lower Elementary
IV IV A V V A	Higher Elementary

6 Standards IV A and V A should be opened only in schools in which provision can be made for Industrial Training

7 The Infant and the I Standards extending over two years may be completed in the case of intelligent pupils and those that have had training at home in one year

The entire Elementary course will thus extend over five or six years in schools providing no industrial instruction and over seven or eight years in schools providing it

8 All such Anglo Vernacular schools as desire to train pupils for the Vernacular course should provide a distinct Vernacular course *parallel* to the English The former should consist of all the required Vernacular standards After a pupil finishes the III Vernacular standard, it should be open to him to elect either the Anglo Vernacular course or the Vernacular In the former case Industrial Training will not form part of the curriculum In the latter unless pupils are specially exempted under the Departmental Rules framed in this behalf Industrial Training should be compulsory

9 The IV and V Standards should not be opened in any school unless and until separate teachers are provided for them The IV A and V A Standards should have separate teachers when their strength exceeds a certain number to be fixed by the Education Department with due regard to local circumstances and the needs of the school

10 In all Elementary Schools *practical instruction* should be given along with literary But such practical instruction as is purely of an *Industrial* character should be given only in those schools that can command the requisite facilities and satisfy the conditions laid down in the paras relating to industrial instruction

11 *Literary instruction* —In the Infant I II and III Vernacular Standards the existing curriculum should be recast so as to include the following subjects —

Reading Recitation
Writing Spelling Composition (with elements of Grammar)
Arithmetic
Object lessons and nature study with elements of science
Drawing and hand work as in Table I
Singing Games Drill and Physical Exercise
Stories including Moral Stories
Elementary Geography and History
Lessons in Health

12 In the IV IV A V and V A Standards the following revised curriculum should be adopted —

Subject	Number of hours per week
Religious and Moral Instruction	2½ hours
Mother tongue	7
Arithmetic	4
History and Geography	2
Science subjects	2
Additional subjects	2
Drawing	2
Industrial Training three afternoon lessons of two hours each	6
Music Drill and Physical Exercise	Time should be found after school hours

13 In the IV and V Standards of schools preparing candidates for the Lower Secondary Examination and not making industrial instruction a part of their curriculum provision should be made for instruction in Manual Training in addition to the subjects prescribed for the Lower Secondary Examination

14 In schools in which Industrial Training is given the literary courses of the IV and V Standards should be spread over four years covering the IV IV A V and V A Standards

15 The science subjects shall comprise—

1 Hygiene (including Elementary Physiology)
2 Elements of Natural Science
3 Elementary Physiography

The additional subjects shall comprise—

1 Bookkeeping (Industrial Industrial tens)
2 Domestic Science (including Cookery)
3 Ambulance (for boys)
4 Sick nursing and Sewing (for girls)

16 *Note that one of the science and one of the additional subjects should be allowed to be taken up by a pupil at a time*

17 The details of the curricula should be drawn up by the Education Department The lines on which such details may be filled in are broadly indicated in Table II Inasmuch as a reform of the methods of instruction and of the direction of the teacher's work is more urgently needed than a revision of the curricula adequate provision should be made by the Inspector General of Education for having the curricula as recast worked according to *modern* methods of teaching

18 *Practical instruction*—Up to the III Standard that is in the Lower Elementary course practical instruction should be given by the employment of the Kindergarten and the Manual Training Methods on the lines indicated in Table I which is based on the Special Report on Manual Training by Mr H J Bhabha the late Inspector General of Education in Mysore

19 In all the standards above the III that is in the Higher Elementary course practical instruction should be of an Industrial character and given on the lines indicated below In those Vernacular Schools in which the Industrial Curriculum is not adopted (*vide* para 13) the Manual Training Course for the Higher Elementary Standards should be that prescribed by the department and in the Special Report on Manual Training by Mr H J Bhabha

20 *Industrial instruction*—The Elementary Industrial Training proposed to be given in the Higher Elementary Standards should cover a course of four years which in the opinion of the Committee is the minimum required to enable one ultimately to earn a living For the important industrial subjects the curriculum of four years given on pages 48 and 52 of the Mysore Education Rules Part II is recommended And for the rest the curricula should be drawn up by the Education Department in consultation with experts as necessity arises

21 Such pupils as have completed the Lower Elementary course of study in any Vernacular School may if they so desire pursue only the industrial course in any Higher Elementary or separate Industrial School In the case of such pupils the course may be shortened by a year

22 After finishing the Elementary Industrial course of four years prescribed here a pupil may proceed to Higher or Advanced Industrial course in the separate trade or Industrial Schools now existing or to be established in the future

23 The following are the industries which may be usefully taught each group being treated for educational purposes as one subject or industry —

Group A	(*a*) Agriculture
	(*b*) Gardening
	(*c*) Dairying
	(*d*) Apiculture
	(*e*) Animal production (breeding and management of live stock)
Group B	(*a*) Sericulture
	(*b*) Eri silk production
Group C	(*a*) Rope making
	(*b*) String work
	(*c*) Mat and basket making (Out of leaves rushes fibres with green embrocarpus Anacardium)
	(*d*) Bamboo work
	(*e*) Rattan work
	(*f*) Coir rope making
Group D	(*a*) Carpentry
	(*b*) Blacksmithing
Group E	(*a*) Metal (brass and copper work)
	(*b*) Bell metal casting
Group F	(*a*) Pottery
	(*b*) Glass bangle making
	(*c*) Soapstone work
Group G	(*a*) Coarse cotton weaving
	(*b*) Rug making
	(*c*) Rough cumbli weaving
Group H	(*a*) Weaving finer counts (sadies etc)
	(*b*) Dyeing
Group I	(*a*) Tailoring
	(*b*) Ordinary dress making
Group J	(*a*) Shoe making and cobbling
	(*b*) Tanning

Group K	(a) Wood turning
	(b) Toys making
Group L	(a) Book binding
Group M	(a) Tin smithing
	(b) Wire goods making
Group N	(a) The making of horn articles
	(b) Cocoanut shell articles
	(c) Arecanut fibre articles
	(d) Brushes
	(e) Walking sticks
Group O	(a) Needle work
	(b) Embroidery
Group P	(a) Cookery
	(b) Syrup and pickle making
	(c) Confectionary
	(d) Distilling essential oils
	(e) Making farinaceous food stuffs

24 In the selection of any industry for purposes of training pupils in not only local facilities climatic and other conditions but also the economic possibilities of success must be considered as far as possible

For rural schools group A may be made compulsory

25 *Teachers* —Seeing that out of every six teachers of Elementary Schools in this Province only one is a trained person it is highly necessary that more facilities should be created for training literary teachers and that especially in modern methods of Practical Instruction

26 For Industrial Training while it is indispensable that only trained teachers should be employed it is the opinion of the Committee that no separate teachers are required to start with In the existing circumstances of the country it facilitates the introduction of our scheme to make a selection of such of the literary teachers as possess aptitude and enthusiasm and give them the requisite industrial training to take up the work

27 The Industrial Training for the teachers may be given by means of—

(1) special vacation or holiday courses at select centres by experts employed by Government or private agencies

(2) deputation for suitable periods to (a) farms like the Hebbal (b) gardens like the Lal Bagh and (c) industrial schools like the one at Mysore

(3) a course of Industrial Training specially provided in the Normal Schools

28 Wherever it is possible an expert craftsman may be employed for a short time to teach not only the pupils but also one or more of the teachers of a school When the teachers are sufficiently advanced the services of the experts may be dispensed with

29 *Manuals bulletins and text books* —To help teachers as well as pupils the Education Department should arrange to publish from time to time teacher manuals and bulletins prepared by experts on each subject literary or industrial Suitable text books for pupils have also to be provided and revised from time to time

30 *Demonstration and experimental institutions* —Though the question of separate industrial institutions is not a subject within the province of this Committee yet the maintenance of some central institutions for experimental work is considered absolutely necessary especially for the purpose of training teachers in the latest methods and processes of industry Such institutions would also serve for purposes of demonstration occasionally and the Committee cannot too strongly urge this point for the consideration of Government

31 *Bonuses for teachers of industries* —No regular pay is recommended for the teachers for the present Bonuses ranging from Rs 20 to Rs 50 may be awarded annually to the most successful teachers of industries

32 *Examination and inspection* —There should be held every year in convenient centres an examination of the industrial training given in schools by a Committee of three members who shall recommend to the Inspector General of Education such pupils as deserve pass certificates This Committee should also report upon the quality of work done by the teachers recommending the deserving ones for bonuses

33 The Committee should be appointed each year by the Local Examination Committee The Committee so appointed should visit each school if possible but when the number of such schools is large it should hold the examination at convenient centres which should be previously determined by the Inspector General

34 The rules for the conduct of the Examination should be framed by the Inspector General

35 *The Central School* —To bring the benefits of Industrial Training within the reach of even small schools the formation of Central Schools should be encouraged wherever several small village schools are situated sufficiently near one another The most central one should be allowed to have standards above the III Vernacular with the requisite provision for Industrial Training though the strength of the Central School itself may be poor

The grown up lads of all the surroundin villages may after passing the III Standard join the Central School either for further literary instruction or for Industrial Training

36 *Equipment*—To every school that teaches agriculture two acres of dry land and wherever possible half an acre of wet should be granted free The teachers should with the co operation of local raiyats and other leading men such as the members of the School Committee arrange for the cultivation of the land

37 Pupils should as a rule provide themselves with all the ordinary tools In the case of exceedingly poor pupils the Inspector General may make a grant for supplying them with tools but such tools are to be the property of the school

38 To meet the initial or recurring or contingent expenses and to provide the school with such implements and tools as the pupils may not be able to procure for themselves the Inspector General may after necessary enquiry make a grant

39 *Provision of funds*—For all expenses connected with the Industrial Training of pupils in Elementary Schools the Committee recommend that *for the first few years* a lump sum grant may be placed annually at the disposal of the Inspector General After gaining experience specific allotments may be made and additional funds given

40 *Allowances stipends and fees etc*—Such teachers as are deputed to other places for special industrial training should be paid in addition to their expenses of travelling an allowance of not less than half their monthly salary and not exceeding Rs 10 per mensem to meet the additional expenses incurred by them

41 To sons of artisans obliged to leave their homes solely to undergo industrial training scholarship of Rs 6 a month may be granted for not more than four years for some years to come

42 No fees should be charged for industrial instruction

43 *Articles made and accounts*—Pupils may be allowed the option of purchasing any of the articles made by them by paying the cost of the material.

44 The articles made in the industrial schools should be disposed of in accordance with departmental rules for industrial schools

45 All the accounts of the industrial section of the school should be checked by the Inspection Committee that visits the school annually

46 *General*—For the first few years the revised scheme herein proposed should be introduced only *tentatively* into a few select schools where teachers are prepared to undertake the work and where the requisite scope and facilities exist

C KRISHNA RAO
K H RAMIAH
M RAMASWAMAIYA
S RANGACHARLU
B DASAPPA
H SRINIVASA RAO
V SUBRAHMANYA IYER

Subject to my views expressed in the note of dissent already submitted to the Committee

B D
13 3 12

Secretary

M SHAMA RAO
Offg Deputy Commissioner Tumkur District and President of the Practical Instruction Committee

TABLE I

Tabular statement showing practical activities from the Infant Class or Kindergarten to Standard III

	Infant Class or Kindergarten Age 5—6	Standard I Age 6—7	Standard II Age 7—8	Vernacular Standard III or Anglo Vernacular Standard I Age 8—9
Drawing	(1) Mass drawing with crayon of simple objects such as the sun the moon eggs etc on wall black boards or free arm boards (2) Mass drawing with crayon of leaves of familiar plants (Three half hours)	(1) Free hand and free arm line drawing with crayon of easy and familiar objects from the objects themselves (2) Free hand line drawing with crayon of leaves of irregular shape in connection with the nature lessons (3) Illustrations of stories told or of stories in Reading Book (Three half hours)	(1) Free hand and free arm line drawing with pencil or crayon of familiar objects from flat examples (2) Drawing of bunches of leaves and fruits (Three half hours)	(1) Free hand drawing with pencil of familiar objects bunches of leaves fruits flowers etc from memory (2) Illustrations in connection with reading conversation lesson Geography and History (Two periods of 45 minutes each)
Clay modelling	Modelling of easy natural objects in connection with nature study lessons (Two half hours)	(1) Modelling of single leaves fruits pods etc in connection with nature study lessons (2) Modelling of pottery (Two half hours)	(1) Modelling of fruits vegetables stems branches bunches of leaves feathers of birds etc (2) Modelling of small articles in common use (Two periods of 45 minutes each)	(1) Modelling of flowers and bunches of flowers in connection with nature study lessons (2) Modelling of the class room school building hills villages rivers etc in connection with Geography (Two periods of 45 minutes each)
Brush work		(1) Blobbing line drawing and washing (2) Exercises in colour mixing (3) Painting of easy natural objects such as broad leaves of simple structure (Two half hours)	(1) Painting of flowers bunches of leaves etc (2) Painting of simple designs (Two half hours)	Painting of natural objects
Stick and ring laying string laying seed placing	(1) Laying simple object forms (2) Laying letters of the alphabet	(1) Laying more difficult object forms (2) Laying simple designs		

Local Fund and Sanitary (Education) dated 9th September 1913

Tablet laying	Laying of simple object forms with squares	(1) Laying of object form with triangles circles etc (2) Laying of flooring designs		
Bead work	Stringing coloured beads	Stringing stated number of beads of different colours in correlation with number work	Making useful objects such as chains necklaces or representation of objects	
Fraying	(1) Drawing out a given number of threads from a piece of bunting (2) Making mats brushes etc of threads so drawn out			
Building with bricks	(1) Building representations of simple objects (2) Laying of forms of beauty gifts III and IV	(1) Construction of representation of objects huts buildings forts towers etc (2) Laying of designs gifts V V B and VI		
Interlacing slats	Making simple object forms such as gardens fence fans etc	Making more complex object forms Interlacing designs		
Spinning and weaving		(1) Washing cardin dyeing wool (2) Cleaning cotton (3) Spinning cotton and wool	(1) Dyeing yarn and wool (2) Making a loom (3) Weaving plain cloth	(1) Making a shuttle heddle and warp stick (2) Weaving with coloured thread
Cane working and basketry Card work			(1) Weaving of bamboo chicks and mats (2) Rope and net weaving	(1) Weaving of bamboo baskets (2) Making of ornamental flower baskets of coloured rushes and grasses (3) Making rattan trays

TABLE I—*concld*

	Infant Class or Kindergarten Age 5—6	Standard I Age 6—7	Standard II Age 7—8	Vernacular Standard III or Anglo Vernacular Standard I Age 8—9
Sand tray work	(1) Forming letters with a clean finger in clean sand (2) Illustrating land and sea sea coast hills mountains rivers table land and volcanoes	(1) Illustrating more geographical terms (2) Plans of the school house school garden and surroundings	(1) Representative scenes of an Indian village of a tank and fields of pasture lands (2) Representation of caves forests etc	(1) Representative scenes of (*a*) pastoral life (*b*) agricultural life (2) Representation of a geographical area or province
Paper folding	Folding of simple forms of objects	(1) Folding of more difficult forms of objects (2) Folding of designs		
Paper cutting		Cutting of simple object forms free cutting as well as drawing and cutting to be practised		
Gardboard work				First year's course as given in Rich's book on paper sloyd (Two half hours)
School gardening	Gardening (Three periods of 15 minutes each)	Gardening (Two half hours)	Gardening (Two periods)	Gardening (Two periods)

1913-14

GOVERNMENT OF HIS HIGHNESS
THE MAHARAJA OF MYSORE

LOCAL FUND AND SANITARY
(EDUCATION)

PROCEEDINGS

Dated 9th September 1913

No $\frac{3440\text{-}\text{[illegible]}}{\text{Edn } 224\text{-}0^{6}}$

Passes orders on the subject of revising the curricula of Elementary Schools and of providing Practical Instruction in them

GPL—11 11 13—200

from the same no 1323 dt 8-4-12 States that
a proof of some of the first portion of the
chapter will be sent & that the work being
heavy it is not possible to carry the business
through for want of sufficient lights

Do to Mr Yates, Supdt Govt Press, Do no 7592 dt 13-4-12
asks him to send a few copies of the report at least
before next afternoon

To the Same, Do dt 28-5-12 Requests him to
send the printed copies at once

To the Secy to the Edn Comm of Econ Conf no 9659
of 18-6-12 Understanding that the scheme
practical instruction in rural schools
under consideration of the Committee desires
to have the views of the Committee at an early
date

From the Same, no 116 dt 8-10-12, no 116 dt 8-10-12
submits copy of a resolution of the Committee
on the report to the effect that the Education
Committee approves of the general principles
of the scheme without committing itself to
the details of a administrative arrangements

) To the Dy Q of Edn, members of the Committee of
Economic Conference, no 3440-9 dt 9-9-13
Passes orders on the subject of revising the
curricula of Elementary schools & of providing
practical instruction in them

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1913-14

GOVERNMENT OF HIS HIG
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(EDUCATION)

PROCEEDINGS

Dated 9th September 1913

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GPL—11 11 13—200

rom the same no 1323 Dt 8-4-12 States that proof of some of the first portion of the hover will be sent & that the work being avey it is not possible to carry the business ough for want of sufficient lights

Do Mr Yates, Supdt Govt Press, Do no 7592 Dt 13-4-12 ks him to send a few copies of the report as least before next afternoon

To the Same, Do Dt 28-5-12 Requests him to send the printed copies at once

To the Secy to the Gon Comm of Eco Conf no 9659 Dt 18-6-12 Understanding that the scheme practical instruction in rural schools under consideration of the Committee desires to have the views of the Committee at an early date

From the Same, no 116 Dt 8-10-12, no 116 Dt 8-10-12 Submits copy of a resolution of the Committee on the report to the effect that the Education Committee approves of the general principles of the scheme without committing itself to the details of administrative arrangements

) To the Dy Gen of Edn, members of the Committee of Economic Conference, no 3440-9 Dt 9-9-13 Issues orders on the subject of revising the curricula of Elementary schools & of providing practical instruction in them

[illegible]
-12-13